2	COMMONWEALT	TH OF KENTUC	KY
3	BEFORE THE PUBLIC S	SERVICE COMN	MISSION
4			
5			
6	Petition of Southeast Telephone, Inc., for	)	
7	Arbitration of Certain Terms and	)	
8	Conditions of the Proposed Agreement with		
9	Kentucky ALLTEL, Inc., Pursuant to the	)	No. 2003-00115
10	Communications Act of 1934, as amended	)	
11	by the Telecommunications Act of 1996	<b>)</b>	
12		r	
13			
14			
15	DIRECT TI	ESTIMONY	
16	O	<b>)</b> F	
17	JIMMY	DOLAN	
18			
19			
20 21			
22			
23			
24 25			
25 26			
27			
28	ON BEHALF OF KENT	TUCKY ALLTEL.	INC.
29		<b> </b>	
30			
31			
32			
33			
34			
35			
36			
37			
38 39			
10			
11			
12			
13			
4			
15			Filed November 10, 2003

3		DIRECT TESTIMONY OF JIMMY DOLAN
4 5	Q.	Please state your name and business address.
6	A.	My name is Jimmy Dolan. My business address is One Allied Drive, Little Rock,
7		Arkansas 72202.
8		
9	Q.	By whom are you employed and in what capacity?
10	A.	I am employed by ALLTEL Communications, Inc. as Manager of Negotiations.
11 12		
13	Q.	Please describe your experience in the telecommunications industry.
14	A.	I have been employed by ALLTEL since 1997. Since that time, I have held positions
15		in wireless sales and project management and served as Manager of Interconnection
16		Services for ALLTEL's Western Region. I have spent the last year and a half as a
17		Manager in Wholesale Services and Negotiations. I interface with competitive local
18		exchange carriers ("CLECs") and with other ALLTEL personnel that procure, among
19		other things, CLEC orders, including cross connects, collocation, hot cuts, and number
20		porting.
21		
22 23	Q.	What is the purpose of your testimony in this proceeding?
24	A.	My testimony generally will demonstrate that no operational barriers exist to CLECs
25		utilizing Kentucky ALLTEL, Inc.'s ("Kentucky ALLTEL") unbundled loops, cross
26		connects, collocation and number porting and hot cut processes. I will also describe
27		the extent to which some carriers are self-provisioning switches and using their own
28		facilities to reach end users, as well as the number of collocation spaces being leased

to CLECs and the number of mass and enterprise market customers in the Kentucky
 ALLTEL market.

**5** 

# Q. Please provide an overview of your testimony.

A. Kentucky ALLTEL has procedures for provisioning service on unbundled network
element ("UNE") loops from the time an order is received to the time the physical
cross connect to the CLEC is completed and the process that is followed when a
CLEC requests local number portability ("LNP") and/or hot cuts. Kentucky ALLTEL
also has processes in place with respect to collocation and has a number of CLEC
collocations in Lexington. CLECs are in fact currently serving customers in Kentucky.

A.

# Q. What is Kentucky ALLTEL's process for the provisioning of UNE loops and LNP, and what is the time frame for completing the process?

Kentucky ALLTEL receives UNE loop and LNP orders via its web-based graphic user interface ("GUI"), called ALLTEL Express. When a loop and/or LNP order is received, a representative from ALLTEL's Local Service Provider Access Center ("LSPAC") enters the order into the appropriate ALLTEL database to initiate work orders for the required ALLTEL work groups and reserve the necessary facilities. The LSPAC provides a firm order confirmation ("FOC") to the CLEC within twenty-four to forty-eight hours. The FOC reflects a due date of ten to fifteen days, and the CLEC is provided with the email address of the ALLTEL representative responsible for the order. Orders for LNP follow the same process, and the number(s) will be pushed to the CLEC on the date specified on the FOC.

# 2 Q. Does Kentucky ALLTEL have problems meeting FOC dates or providing

# 3 facilities?

No, Kentucky ALLTEL has not experienced problems meeting FOC dates or A. 4 providing facilities. Since August of 2002, Kentucky ALLTEL has ported over 5 10,000 telephone numbers and has installed approximately 200 UNE loops with cross 6 7 connects without any significant issues or delays. If a CLEC has any questions during the provisioning of its service, it may rely on the escalation list it is provided by 8 9 Kentucky ALLTEL. The escalation list allows the CLEC, if necessary, to escalate to a Vice President level within ALLTEL, although escalation to this level has not 10 11 occurred during any of the above referenced UNE loop installations or porting of numbers. In addition, no formal complaints have been filed with the Kentucky Public 12 13 Service Commission ("Commission") with respect to Kentucky ALLTEL's 14 provisioning; in fact, there could have been no such complaints as CLEC have not had 15 any such operational problems that have posed as barriers to providing service.

16

17

# 18 Q. Does Kentucky ALLTEL receive requests for hot cuts?

19 A. Yes, it does.

20 21

# 22 Q. How many average hot cuts does Kentucky ALLTEL perform?

A. Kentucky ALLTEL has received a total of sixty-nine hot cut requests since August of 2002. These sixty-nine requests were issued by five different CLECs, totaling 218 lines.

# 2 Q. Did Kentucky ALLTEL reject any of those hot cut requests?

3 A. No, Kentucky ALLTEL did not.

4 5

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

# 6 Q. What is Kentucky ALLTEL's process for handling hot cuts?

Initially, a CLEC requests a hot cut by issuing a Local Service Request ("LSR"). Kentucky ALLTEL has received requests for hot cuts with respect to both LNP-only orders and UNE loop orders with LNP. The requesting CLEC specifies the exact date and time that it wishes to complete the hot cut. When parties have agreed upon a time for the hot cut to occur, Kentucky ALLTEL schedules a Central Office ("CO") technician and the required LSPAC personnel to be present at their workstations to conduct the hot cut. The CLEC is provided with the contact information of the ALLTEL representative who is coordinating the hot cut so that the CLEC can contact Kentucky ALLTEL at any time during the hot cut process. At the scheduled time, both the CLEC and Kentucky ALLTEL verify that each of them is ready for the hot cut to proceed. Thereafter, upon mutual verification, the Kentucky ALLTEL CO technician makes the cross connect, if required, and the LSPAC representative verifies that the end user's telephone number has in fact ported to the requesting CLEC. The CLEC is responsible then for testing the number, and the Kentucky ALLTEL personnel completing the hot cut remain in place until the service is operational. If a CLEC requests a hot cut for blocks of numbers or for various locations at one time. Kentucky ALLTEL schedules personnel appropriately and follows the same process.

24 25

26

27

# Q. Has Kentucky ALLTEL experienced any problems in meeting CLECs' requested times for hot cuts?

2 A. No, Kentucky ALLTEL has not experienced any problems in meeting CLECs'

requested times for hot cuts.

4 5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

A.

# Q. How does Kentucky ALLTEL handle CLEC collocation requests?

Kentucky ALLTEL's collocation policies, practices and pricing are documented in Kentucky ALLTEL's Interstate Access Tariff ("access tariff"). Pursuant to the access tariff, the CLEC may submit an application for collocation and must include the application fee. Within eight days of receipt of the application, Kentucky ALLTEL provides the CLEC with a quote based on the CLEC's specific information included in the CLEC's collocation application. The CLEC then either accepts or rejects the quote. If the CLEC accepts the quote, it is required to remit half of the total quoted price to Kentucky ALLTEL. Upon receipt of these funds, a Kentucky ALLTEL project coordinator will schedule meetings with the CLEC to review the project plans for the construction of the collocation space and installation of the CLEC's equipment. The Kentucky ALLTEL project coordinator remains available for the CLEC to contact at any time. Upon completion of construction of the collocation space, the CLEC is given the opportunity to inspect the space prior to accepting it to ensure that the work was completed in accordance with the quote. Upon the CLEC's acceptance, Kentucky ALLTEL prepares a final billing for the collocation in order to collect the outstanding balance.

23 24

25

26

Q. Has Kentucky ALLTEL experienced problems with availability of space in any of its end offices in Kentucky.

A. No. Kentucky ALLTEL has not encountered space problems in any of it end offices in

Kentucky. Presently, Kentucky ALLTEL has a total of six CLECs with eighteen total

collocation spaces in Kentucky, three of which are virtual collocation. Kentucky

ALLTEL does not have any space availability issues in any of its offices at this time.

Further, Kentucky ALLTEL has routinely met the timeframes specified in its access

tariff for new collocation requests and augments of existing collocation spaces.

Despite its answer to Data Request Item No. 56, in which it claimed that it is not planning any Class 5 switch collocations at this time or in the foreseeable future, Southeast Telephone, Inc. ("SETel") has indicated to Kentucky ALLTEL that it plans to collocate in Kentucky ALLTEL's territory. Kentucky ALLTEL is prepared to accommodate SETel's request and has conveyed as much to SETel.

Q.

# Have you been involved in the interconnection negotiations with SETel?

A. Yes, I have been both directly and indirectly involved in the interconnection negotiations with SETel for eighteen months. I have reviewed the entire file regarding the negotiations that occurred prior to my direct involvement and have discussed those negotiations with the ALLTEL employees that were involved.

# Q. In those negotiations has SETel expressed any concern with respect to Kentucky ALLTEL's operations or any related matter?

A. No. SETel made it clear during negotiations that it plans to collocate in Kentucky

ALLTEL's offices, intends to provide UNE loops, and has experience in collocation

and UNE loop utilization. SETel raised only minor questions with respect to specific

terms and conditions related to operating support systems ("OSS") policies and practices contained in the contract from which the parties negotiated. The specific terms and conditions questioned by SETel did not apply to Kentucky ALLTEL and were removed from the draft contract. SETel also requested that Kentucky ALLTEL allow it to maintain its current point of interconnection ("POI") and that Kentucky ALLTEL not require a change to SETel's POI after a final agreement was reached. Kentucky ALLTEL agreed to SETel's request, and appropriate terms and conditions were inserted in the draft contract in support of that position. SETel never raised any concerns with respect to Kentucky ALLTEL's collocation processes or collocation costs during the negotiations.

- Q. Are you familiar with the operations or ordering practices of other CLECs that operate in the Kentucky ALLTEL area?
- 16 A. Yes, I am.

- Q. What types of services do CLECs order from Kentucky ALLTEL, and are those
   CLECs serving mass market or enterprise market customers?
- 21 A. The majority of orders that Kentucky ALLTEL receives from CLECs in Kentucky are
  22 for LNP only. With respect to these LNP orders, Kentucky ALLTEL ports the
  23 number to the CLEC who then provisions the service over its CLEC-owned facilities.
  24 Kentucky ALLTEL has also received CLEC orders for UNE loops, reuse of existing
  25 Kentucky ALLTEL facilities, and porting of the local telephone number. The UNE
  26 loops ordered by the CLEC are DS0s or DS1s. Subsequent to August of 2002, CLECs
  27 in Kentucky ALLTEL's territory have placed orders to port (LNP) from Kentucky

ALLTEL in excess of 10,000 telephone numbers, then representing over 6,648 mass market customers and 289 enterprise market customers.

Attached to my testimony and incorporated herein by reference is a spreadsheet denoting the carriers operating in the greater Lexington market, the numbers ported, and their total customers (which is further broken down by enterprise and mass market). ("Attachment 1") An unredacted copy of Attachment 1 is being filed with the Kentucky Public Service Commission only pursuant to a Petition for Confidential Treatment and is only being provided to SETel's attorney and designated Representatives pursuant to SETel's execution of a Nondisclosure Agreement.

# Q. Have all of these telephone numbers been provisioned over UNE loops?

15 A. No, they have not. Kentucky ALLTEL has provisioned approximately 200 UNE loops since August 2002.

Α.

# Q. In your opinion, why is the number of ported numbers so much greater than the number of UNE loops?

The large difference in the number of UNE loops versus the number of telephone numbers ported is mainly due to the majority of the numbers being ported to CLECs that provide their own facilities. These CLECs include ILECs who are competing with Kentucky ALLTEL as CLECs leasing wholesale switching from their ILEC affiliates. Other CLECs include AT&T Broadband and Telcove f/k/a Adelphia who serve customers using a cable telephony network leased from providers such as Insight

2		Communications. CLECs using their own facilities or leasing them from others do not
3		need loops or switching from Kentucky ALLTEL.
4 5 6	Q.	Have other CLECs requested that Kentucky ALLTEL provide unbundled local
·	ζ.	
7		switching in Kentucky, and if so, in your opinion what potential impact do you
8		see to Kentucky ALLTEL?
9	A.	I am aware of at least five different CLECs who have recently inquired about
10		Kentucky ALLTEL providing unbundled local switching in Kentucky for the purpose
11		of those CLECs obtaining UNE-P. The potential impacts of these requests to
12		Kentucky ALLTEL are discussed by Kentucky ALLTEL witness, Steve Mowery.
13 14 15	Q.	Has Kentucky ALLTEL experienced any loss of wireline customers to wireless
13	Q.	
16		providers?
17	A.	Yes. Since January 2003, Kentucky ALLTEL has been informed by more than 900
18		wireline customers that they were disconnecting their wireline service and substituting
19		it with new service with a wireless provider. Intermodal competition is therefore very
20		active in Kentucky ALLTEL's territory.
21		
22 23	Q.	Please summarize your testimony.
23	Q.	
24	A.	No operational barriers exist to CLECs utilizing Kentucky ALLTEL's unbundled
25		loops, cross connects, collocation and number porting and hot cut processes. Some
26		carriers in the greater Lexington market are self-provisioning switches and using their
27		own facilities to reach end users. Further, Kentucky ALLTEL is leasing a number of

2		collocation spaces to CLECs who are providing service to mass market and enterprise
3		market customers throughout the Commonwealth.
4		
6	Q.	Does this conclude your testimony?
7	A.	Yes, at this time.
8		

# **Dolan Exhibit 1**

OCN	Carrier	TN's Ported	Total Customers	Enterprise	Mass market
		1000	107	72	35
		11	3	2	1
		8	4	1	3
		1095	591	67	524
		1548	1149	49	1100
4		1460	1258	6	1252
		, 8	1	1	0
		403	70	39	31
		3544	2942	19	2923
		1090	811	32	779
		22	1	1	0
Totals		10189	6937	289	6648

# Confidentia

1	COMMONWEALTH OF KENTUCKY
2	
3	BEFORE THE PUBLIC SERVICE COMMISSION
4	
5	
6	Petition of Southeast Telephone, Inc., for
7	Arbitration of Certain Terms and
8	Conditions of the Proposed Agreement with )
9	Kentucky ALLTEL, Inc., Pursuant to the Docket No. 2003-00115
10	Communications Act of 1934, as amended
11	by the Telecommunications Act of 1996
12	
13 14	
14	
15	DIRECT TESTIMONY
16	OF
17	TIMOTHY W. WAGNER
18	
19	
20	
21	
22	ON BEHALF OF KENTUCKY ALLTEL, INC.
23	
24	
25	
26	
27	
28	Filed November 10, 2003

1		DIRECT TESTIMONY OF TIMOTHY W. WAGNER
2		
3	Q.	Please state your name and business address.
4	A.	My name is Timothy W. Wagner. My business address is One Allied Drive, Little Rock,
5		Arkansas 72202.
6		
7	Q.	By whom are you employed and in what capacity?
8	A.	I am employed by ALLTEL Communications, Inc. as Staff Manager of Long Range-Wireline
9		Network Planning. I am testifying in this proceeding on behalf of Kentucky ALLTEL, Inc.
10		("Kentucky ALLTEL"), which is an incumbent local exchange carrier ("ILEC") serving various
11		exchanges throughout the Commonwealth.
12 13		
14	Q.	Please describe your experience with ALLTEL and in the telecommunications industry.
15	A.	I began my career in 1984 with ALLTEL, as an Engineer. I have served in various engineering
16		positions and managerial positions in network engineering, and network planning over the last 19
17		years. I was named Staff Manger of Long Range-Wireline Network Planning in 2001. My
18		responsibilities in this position include management and oversight of the wireline network strategy
19		and evaluation of next generation network elements for ALLTEL's communications subsidiaries
20		and affiliates.
21 22		
23	Q.	What is the purpose of your testimony in this proceedings?
24	A.	The purpose of my testimony is to demonstrate that Southeast Telephone, Inc. ("SETel") has the
25		current ability to provide its own local switching and transport and to additionally outline
26		numerous alternative switching and transport arrangements that are available to SETel. These
27		include alternatives for SETel's current switching and transport capabilities within Kentucky
28		ALLTEL's Lexington exchange area, alternatives for additional or new switching facilities, and
29		alternatives for transport to other switching centers.

# Q. What kind of telecommunications provider is SETel?

an interexchange carrier ("IXC"). Additionally, SETel offers dial-up Internet and broadband

digital subscriber line ("DSL") data services in the Commonwealth of Kentucky.

A.

# Q. What services does SETel provide as a CLEC?

As evidenced on SETel's website (www.setel.com), SETel is currently providing local service and prepaid service to mass market and enterprise market customers in several locations in the Commonwealth. SETel offers its mass market local customers vertical features such as call waiting, call return, caller identification, third party calling, and area calling. Additionally, SETel offers various calling packages for businesses and residential service (both mass market and enterprise market customers) including long distance, dial-up Internet, and DSL access. SETel provides such DSL service through a resale arrangement with BellSouth, as noted by SETel President, Darrell Maynard, in his presentation (Public Meeting on Rural Broadband Access) to the Rural Utilities Service on June 27, 2002.

A.

# Q. Does SETel have a switch in Kentucky ALLTEL's Lexington exchange?

Yes. SETel has advised Kentucky ALLTEL of its switch through various means, including, but not limited to, SETel's listing the switch on the Local Exchange Routing Guide ("LERG"), identifying the switch in the access service requests ("ASRs") that SETel has submitted to Kentucky ALLTEL when it ordered trunks from Kentucky ALLTEL, in direct conversations between the companies, and in the informal conference held with the Staff of the Kentucky Public Service Commission ("Commission") with respect to this proceeding. The LERG, Section 7, identifies SETel's switch as ID LXTNKY24W26. Attachment 1 to my testimony contains a copy of this section of the LERG.

Q. Can you briefly describe the LERG and its function within the telecommunications industry?

A. The LERG is an online database operated by Telcordia (formerly Bellcore). Its primary purposes are to provide a resource through which all telecommunications carriers can identify their switches and to provide notice to all carriers and the industry of any network changes and of all routing details necessary for carriers to participate in the United States telecommunications industry.

are to provide a resource through which all telecommunications carriers can identify their switches and to provide notice to all carriers and the industry of any network changes and of all routing details necessary for carriers to participate in the United States telecommunications industry. Unless a carrier accurately and regularly participates in posting its switch and routing information to the LERG, it will not be able to participate in telecommunications in the United States. Switch homing information, NPA-NXX routing, as well as network element and equipment designation are all recorded by switch ID or by NPA/NXX. The LERG is a clearinghouse for network conversions, NPA/NXX routing changes, and/or NPA/NXX splits. It contains a listing of local routing data such as destination codes, switching entities, rate centers and locality information by LATA. Again, the LERG is an essential tool for telecommunications switch and network owners and operators. The integrity of the data entered on the LERG is dependant on each individual carrier, and all carriers are dependant on full and accurate participation in order to make their telecommunications system work.

# Q. Where specifically in Kentucky ALLTEL's Lexington exchange is SETel's switch located?

A. According to the LERG, SETel's switch is located at 301 East Main Street, Suite 620, Lexington,
Kentucky 40507. This switching location is 0.2 miles from Kentucky ALLTEL's Lexington Main
Central Office located at 151 S. Martin Luther King Boulevard. These switching platforms are
currently interconnected for voice traffic. (See Attachment 1 to my testimony.)

# Q. What functions does SETel's switch possess?

SETel has identified it as a local exchange telecommunications switch and has indicated in Section 7 of the LERG that it is an end office. Section 1 on page 19 of the LERG's General Information Guide (attached to my testimony as Attachment 2) defines "end office" as an office capable of line-to-line, line-to-trunk, and trunk-to-trunk connections. This indicates that SETel's switch is capable of switching voice traffic. SETel has also indicated that the switch is a host. Section 1 on page 21 of the LERG's General Information Guide (also included in Attachment 2 to my testimony) defines a "host" as a switching office that provides certain common processor functions for a remote entity. All of this information provided by SETel and posted on the LERG means that its switch is currently capable of switching local exchange voice services in competition with those services traditionally provided by incumbent local exchange carriers ("ILECs").

A.

A.

Q. Can you elaborate on what other details SETel has posted to the LERG with respect to its current switching platform and what this indicates about the capability of SETel's switch being able to supporting CLEC services and what services it is currently supporting?

Yes. There are multiple sections of the LERG online system that work together to inform the industry about a particular carrier's network.

As I have previously described, Section 7 of the LERG (Switch Entity by Switch ID) identifies information about the switches location, serving LATA, equipment type, function in the network, and other information. SETel (which has an OCN of 7514) has identified its switch as LXTNKY24W26 located at the 301 Main Street in Lexington, Kentucky. SETel has also identified this switch as an end office and host. (Please refer again to Attachment 1 to my testimony.)

Section 6 of the LERG (Destination Codes by NPA/NXX) identifies routing information or destination details for the telecommunications industry by NPA/NXX. Section 6 makes it clear

1		that SETel (OCN 7514) owns thirty-three NPA/NXX blocks in the 466 LATA. Therefore, as
2		identified in the LERG, when anyone inside or outside the LATA dials any of these numbers he or
3		she is routed through the network and terminates on the switch identified as LXTNKY24W26.
4		(Please see Attachment 3 to my testimony.)
5		
6		Section 7SHA of the LERG (Switch Homing Arrangement) identifies specific switch homing
7		arrangements ("SHAs") as notification to the telecommunications industry of the type of routable
8		traffic. SETel (OCN 7514) has a homing arrangement identified in Section 7SHA as three tandems
9		in the Winchester LATA (Lexington's serving LATA). SETel has identified Feature Group B &
10		D traffic routes to the Winchester 02T tandem, Feature Group B & D to the Lexington 01T
11		tandem, and Feature Group D to the Danville 01T tandem. This arrangement provides for
12		originating and terminating traffic to be transported on these facilities to each of these tandem
13		sites. (Please refer to Attachments 4.1, 4.2, and 4.3 to my testimony.)
14		
15		Collectively, these identifiers and routing details provide for the routing (originating and
16		terminating) traffic of the thirty-three NPA/NXXs owned by SETel that reside on the
17		LXTNKY24W26 switch at 301 Main Street, Lexington, Kentucky.
18		
19		
20	Q.	Have you read SETel's Response to Kentucky ALLTEL's Data Request dated November 7,
21		2003, in this proceeding, specifically Item No. 1?
22	A.	Yes, I have.
23		
24	,	
25	Q.	Do you agree with SETel's Response to Item No. 1?
26	A.	No, I do not.
27		

Q. Can you explain why you do not agree with SETel's Response that it does not own, control, or utilize any type of switch that is used to provide a qualifying service anywhere in Kentucky?

A. As previously identified. SETel owns thirty than NRA agree.

As previously identified, SETel owns thirty-three NPA/NXX blocks each totaling 10,000 numbers. These number blocks reside on the switching platform identified as LXTNKY24W26 owned by SETel. A portion of these numbers are utilized in these thirty-three exchanges areas identified in Section 6 of the LERG as Internet dial-up connections for the SETel dial-up Internet product. These numbers are dialable from these exchange communities (rate centers) and from any other telephone nationwide. I personally dialed and received modem tone from number 606-418-0000 from Little Rock, Arkansas on Sunday, November 9, 2003. This number is identified on SETel's website as a dial-up access number for its dial-up Internet product in Irvine, Kentucky, along with multiple other numbers in these thirty-three NPA/NXX blocks. This termination was to the LXTNKY24W26 switch as identified in the three sections of LERG identified above.

Because I can terminate to these number blocks and because SETel's Feature Group B & D facilities are configured for two-way traffic, then I can certainly originate traffic from these 33 NPA/NXXs. By definition, the fact that SETel can terminate traffic alone is a qualifying service. SETel's network is configured to originate traffic on the same facilities within the LATA and outside the LATA. SETel owns this switch, and currently operates it providing qualifying service.

A.

# Q. What type of switch is located at 301 East Main Street?

It is an Excel LNX 2000 switching platform. The LNX 2000 is a carrier-class open architecture switching platform, capable of supporting many services. These services include, but are not limited to, Internet dial-up, tandem, toll, and local voice services. The open architecture allows for the multi-service platform. The switch type information was provided to Kentucky ALLTEL in ASRs issued by SETel during Kentucky ALLTEL's tandem rehoming project in the first quarter

of 2003. These ASRs are attached hereto as Attachment 5 to my testimony and reflect that the switch is identified in the AcSw Type field as an Excel LNX 2000.

**5** 

A.

# Q. Can you briefly describe the capabilities of this particular switching platform?

The Excel LNX2000 switching platform is manufactured and supported by Excel Switching Corporation, 75 Perseverance Way, Hyannis, MA 02601. The current SETel platform is currently configured as Time Division Multiplex, TDM, interface system and fully capable of interfacing a subscriber T-1 channel bank or other similar subscriber device. This platform is fully upgradable to the current generation platform supported and sold by Excel Switching Corporation which today is referred to as the "Converged Services Platform, CSP". The CSP, in addition to TDM capable services, will support and enable IP services and IP call control. The LNX2000 switching platform is NEBS3 and (5) 9s compliant and is classified as a carrier-grade switching platform. The 20 slot chassis (16 service slots) interfaces the PSTN and access network via T-1 interfaces and utilizing the 2/4/8/16 port T-1 cards. This platform is capable of SS7 signaling and supports both ISUP and TCAP messaging.

Excel Switching Corporation currently supports an existing 125 switch owners and employees 160 worldwide. Excel Switching Corporation is an established communications network provider of carrier -class open services platforms with 15 years of history in the communications segment.

A.

# Q. What is the switching platform currently being used for?

SETel's switching platform currently supports SETel's IXC products and dial-up Internet products. It currently performs an IXC toll tandem function between three tandems in the Winchester LATA (Lexington, Winchester, and Danville) utilizing Feature Group B & D trunks. Additionally SETel's switch terminates thirty-three NXXs from across the Commonwealth of Kentucky to support SETel's Internet dial-up product.

1		
2	Q.	Is SETel's switching platform capable of supporting CLEC local services in Lexington,
3		Kentucky?
4	A.	Yes. The open architecture is supported by multiple next-generation application providers, like
5		Intellinet, who has partnered with Excel to offer many services on the LNX 2000 platform dating
6		all the way back to 1998. These application providers can provide feature packages for the Excel
7		LNX 200 platform or custom create features.
8		
9		
10	Q.	If SETel's switch were not currently capable of providing services that a CLEC would
11		normally need for serving end-users, can it be upgraded to do so?
12	A.	Yes, but in answering this question, I would like to provide more details on the following:
13		<ul> <li>Application Development and the Open Architecture of the LNX 2000 and</li> </ul>
14		<ul> <li>Two alternatives for this switching platform from which SETel could choose to support</li> </ul>
15		CLEC services.
16		
17		First, I will describe the application development. The open architecture of the LNX 2000 is
18		similar to buying a computer without any operating system software or programs. The application
19		developer would utilize an application development software solution that would load onto the
20		processor and memory of the CPU of the LNX 2000. Utilizing this software, the developer could
21		develop local service features and additional custom features. This is true for both the TDM and
22		IP capabilities of SETel's switching platform. Utilizing this application development software, an
23		SETel employee or consultant (with only a C or C++ understanding of programming) could very
24		likely create additional features in-house.
25		
26		Second, I will describe how utilizing TDM could be accomplished. In addition to the application
27		software, T-1 ports would be required to interface the collocation sites or customer integrated
28		access devices. The telecommunications equipment market is currently saturated with surplus

LNX 2000 interface cards making this hardware addition extremely affordable. The T-1 interface cards are priced on the reuse market between \$34 and \$50 per DS-0 port (voice equivalent channel). An 8-port T-1 card would cost in the range of \$6,500-9,600 each. SETel could gain additional network efficiency by placing a T-1 concentrator system on the access side of the switching platform and concentrating the traffic at a 4:1 or even 6:1 level (based upon P.01 traffic tables). The Carrier Access Navigator product performs this function and costs between \$20,000 and \$30,000 per unit. This solution will interface a total of 32 T-1s and significantly reduce SETel's network cost.

9

10

11

12

13

14

15

16

17

18

1

2

3

4

5

6

7

8

Third, I will describe how feasible utilizing IP is. The LNX 2000 is an IP network enabled device that allows SETel to interface both TDM traffic and IP traffic. This switch will perform a gateway function between these two technologies. With the T-1 additions costing the same as a TDM configuration, SETel could easily interface an IP supported access platform and support both legacy TDM services and IP services to its customer base. One example of these solutions is the suite of products from Occam Networks. Occam's product portfolio includes IP enabled integrated access devices (customer premise equipment) and broadband access devices (capable of collocation in a central office environment). These solutions easily integrate to the LNX 2000 platform and provide next-generation capabilities to SETel's customers.

19

20

21

In addition to this switching solution there are several alternative switching solutions that could easily be integrated into the SETel network.

22 23

24

25

27

28

# Has SETel indicated to Kentucky ALLTEL that it intends to replace its existing LNX 2000 Q. switching platform?

26 A. Yes. On a conference call between Kentucky ALLTEL and SETel on February 10, 2003 (ALLTEL Representatives: Ray Bodnar, and Mary Nitzsche SETel Representative: Wes Maynard), SETel indicated that it would like to replace this switching platform.

Q. Are there other alternatives that a CLEC could utilize to obtain switching capabilities?

3 A. Yes.

**5** 

A.

# Q. Please briefly describe what other options are available to CLECs.

There are multiple next generation switching platforms currently on the market that offer an attractive entry cost into the CLEC market. Attachment 6 to my testimony provides details and illustrates that, by utilizing the Taqua Communications OCX platform (Next-Generation RUS certified platform), SETel could provide one collocation in Lexington Main and place the OCX in its Lexington central office for a one-time cost of \$449,195. The monthly recurring cost for this solution is only \$1,659 (not including the unbundled network element loop or EELs). These figures take into consideration the fact that SETel already has a central office, existing switch, existing technicians, and transport between these locations. Additional collocations would cost \$42,195, if configured as described in the question above with respect to collocation. This Taqua Platform would support 5,000 customers and easily could be upgraded to support additional subscribers at a minimal cost. Again Attachment 6 demonstrates the model Kentucky ALLTEL used to calculate these figures. In addition to this switching platform, there are multiple other vendors marketing both new and reuse switching platforms. Due to the current saturation of used switching platforms and used vendors many reuse platform are available at reduced costs (greater than 50%) in the market place.

A.

# Q. You mentioned collocation interfaces, can you elaborate further?

Utilizing various alternative transport providers in Lexington including the existing transport interface between SETel and Kentucky ALLTEL, SETel can (through Kentucky ALLTEL's Access Tariff) provision virtual collocations into one or all central offices in Lexington. A single collocation into the Kentucky ALLTEL Lexington Main office would cost \$42,109. This is a one-

1		time cost to initially establish service with Kentucky ALLTEL and would include the 10 channel
2		banks (e/w: 480 lines) to interface the subscribers via UNE loops. The monthly recurring cost for
3		this collocation would be \$1,659 (not including UNE Loops or EELs). Additional collocations
4		would be at similar costs in the remaining Lexington central offices. I will further discuss
5		transport options later. Attachment 7 to my testimony contains further collocation details.
6		
7		
8	Q.	You mentioned that SETel currently has transport facilities into the Lexington Main central
9		office, can you elaborate on this issue?
10	A.	SETel has previously ordered and received an OC-12 facility from its switch located at 301 Main
11		to the Lexington Main central office located downtown on Martin Luther King Boulevard. This
12		facility provides SETel access to multiple IXCs, Kentucky ALLTEL's tandem switch,
13		LXTNKYMA01T, and to the many Intra-Metropolitan Transport providers. Currently, SETel
14		utilizes this facility to interface the Kentucky ALLTEL tandem with 264 trunks and the additional
15		two tandems in the Winchester LATA. Attachment 8 to my testimony provides a diagram of this
16		connectivity.
17		
18		
19	Q.	What other transport providers offer transport services in the metro-Lexington area?
20	A.	There are several competitive access providers in the Lexington market today. They include the
21		following:
22		KDL networks, NewSouth, AT&T, and Xspedius offer local access into Kentucky
23		ALLTEL's Lexington Main central office through each of their vast statewide and
24		even nationwide networks. (Please refer to Attachment 8.)
25		• Telcove (formerly known as Adelphia) interfaces Kentucky ALLTEL's switching
26		network in Lexington Main, Southeast, and Lakeside. (Please refer to Attachment 8.)
27		Novox/Gabriel interfaces Kentucky ALLTEL's switching network in Lexington
28		Main, North, and South. (Please refer to Attachment 8.)

Collectively, these transport providers provide alternative transport to four of the Lexington central offices. (Please refer to Attachment 8.) EELs could also provide a cost competitive interface into the other two central offices if necessary. This solution would eliminate the need for collocation in those two remaining offices. Q. Please summarize your testimony of SETel's network capabilities to deliver and support CLEC capabilities in Kentucky ALLTEL's Lexington Market. A. I have demonstrated that SETel owns and operates a switching platform "LXTNKY24W26" (.2 miles) from the Kentucky ALLTEL main central office in Lexington, Kentucky, which switching platform is capable of and is currently performing CLEC services. Further, this switching platform is an open architecture switching platform capable of hosting and supporting collocation services within the Lexington exchange. This switching platform is also currently interconnected with the Lexington switching infrastructure and two additional tandems (Winchester, and Danville) in the Winchester LATA. Utilizing this interconnection and underlying transport facility, SETel can provision transport on multiple alternative transport providers and, utilizing existing UNE and EELs capabilities, gain access through Kentucky ALLTEL's Access Tariff to customers in the Lexington exchange. SETel is not impaired by its existing switching platform nor by the alternative transport options from offering competitive services to residential or commercial customers in the Lexington exchange today. The costs to provide virtual collocations (both one time and monthly recurring cost) and any necessary switching platform upgrades are economically feasible. Additionally, if

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

local and tandem functionality.

SETel chooses to replace its existing switching platform at 301 East Main Street, vendors exist in

the market to provide a low-cost switching alternative for both new and /or used to provide both

- 1 Q. Does this conclude your testimony?
- 2 A. Yes, at this time.

# **LERG 7 - Details**

# **Switching Entities By Switch ID**

SWITCH: LXTN	(Y24W26 S	STATUS:	EFF	DATE:
LATA : 466		LATA WINCHEST	ER KENTU EQI	TYPE : EXC
OCN : 7514		AOCN: G082		
STREET: 301 E	MAIN ST, SUITE	CITY: LEXINGTON	N	
STATE: KY		ZIP: 40507		
CLASS 4/5:	Address reconstruction and the second	IDDD: Y	P	Γ CODE FLAG:
V- COORD : 06460	H-(	COORD : 02561	INDIC	CLN A
	Switching	Entities - Office Func	tionalities (SOF)	
Office	Tandem	ISDN Packet	SS7	Additional
END OFC : X	FG B TDM:	BCR5:	STP:	SW 56 : -
HOST: X	FG C TDM:	BCR6: -	CCS AC OFC:	FGD 56: -
REMOTE : -	FG D TDM:	PRI 64 :  -	800 SSP : -	FGD 64: -
DA OFC : -	OS F	ISDN MULTI RT :	CAPABLE:	INTRA PRSUB :
CLASS 4/5:	OFC:	ISDN FS OFC:	LNP SCP : -	CALL AGENT:
WIRELES OFC:	TDM:	GATEWAY:	10D GTT SCP:	TRUNK GATEWAY :
FG D ADJ E0:	FG D ADJ - TDM :	PACKET X.121 :	ACCESS GATEWAY:	
	LOCAL F-	PACKET E.164:		
	INTRA TDM:			
	CS DATA - TDM:			

AIN ISCP SCP :	CIP:	CSP: -	

The information contained in this message, including attachments, may contain privileged or confidential information that is intended to be delivered only to the person identified above. If you are not the intended recipient, or the person responsible for delivering this message to the intended recipient, ALLTEL requests that you immediately notify the sender and asks that you do not read the message or attachments, and that you delete them without copying or sending them to anyone else

\*

# TABLE OF CONTENTS

Paper LERG Routing Guide: This Table of Contents is geared towards the "paper" version of the Telcordia LERG™ Routing Guide. Sections 1, 2, and 3 are provided in each Volume (1-8 & C) of the LERG Routing Guide. Each subsection within Sections 4, 5, 6, 7, 8, 9 and 10 indicates the Section and Volume number in which they are contained, e.g., Destination Code Subsection 4.1 will be found in Section Four (4) of Volume 1. Note that any references to "Sections" (beyond Section 1) pertain to the *paper* version of the LERG Routing Guide *only*. Due to volume considerations and other factors, not all the data in the "data" versions of the LERG Routing Guide are provided in the paper version.

Data LERG Routing Guide: For the LERG Routing Guide provided on CD ROM, the LERGINFO.DOC file contains text regarding only Section 1 of this Table of Contents. The other sections noted in this Table of Contents pertain to the paper volumes of the LERG Routing Guide only. The data contained in the listed sections appear in various "data files" on the data versions of the LERG Routing Guide (i.e. referred to as LERG1, LERG2, etc.). The appropriate data files are denoted, when applicable, in the Table of Contents and in the text in Section 1. Note that there are several files provided in the data versions of the LERG Routing Guide that may not correspond in whole or part to a specific section in this Table of Contents.

The LERGINFO.DOC file provided on the LERG Routing Guide CD ROM refers to this document. Companies receiving the LERG Routing Guide as transmitted over **NDM** (Network Data Mover (aka Connect:Direct<sup>™</sup>)) may request a copy of this document be emailed to them by calling the Telcordia Routing Administration (TRA) Customer Service Center on 866-NPA-NXXS (i.e. 866-672-6997) or (732) 699-6700, or may download a copy from www.trainfo.com (documents).

1.	LER	G Routing Guide	
	1.1	General	1
	1.2	LERG Routing Guide Structure	1
	1.3	Glossary	
	1.3.	State, Province, Island Code Table (Based on COMMON LANGUAGE® assignments)	46
	1.4	Special Routing/NXX Codes	
	1.4.	Special Plant Test Codes (1XX)	47
	1.4.2	2 Service Codes	48
	1.4.	NANP Universal Central Office Codes ( NXXs )	49
	1.4.4	4 Operator Service Codes	49
	1.5	Signaling System 7 (SS7) Network Codes	
	1.6	Vertical Service Codes	51
	1.6.		
	1.6.2	- · · · · · · · · · · · · · · · · · · ·	
	1.6.3		
	1.7	Carrier Identification Codes (CICs)	
	1.8	Automatic Number Identification (ANI) Information Indicator (II) Digits Codes	
	1.9	Toll-free (e.g. 800) and 900 NXX Code Assignments, Routing Status, Definitions	
	1.10	500 NXX Personal Communications Services (PCS) Code Assignments, Definitions	
	1.11	710 NXX Code Assignments, Routing Procedures, Definitions	
	1.12	Country Codes	
	1.13	976-LIKE Codes	
	1.14	Telcordia™ Routing Administration Product Ordering Information	
	1.15	Business Integrated Routing and Rating Database System (BIRRDS)	
	Online	Access Information:	81

# NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

# 2. Routing Contacts and Operating Company Numbers (LERG1)

This section lists the names, addresses, and telephone numbers of routing contacts sorted by Operating Company Number (OCN). It also includes OCN assignments sorted alphabetically by OCN name.

- 2.1 Listing in Numerical Order
- 2.2 Listing in Alphabetical Order

# 3. NPA, LATA, Signaling System 7 (SS7) Network Code and Country Code Assignments (LERG2,3,4,5)

This section contains the NPA assignments sorted alphabetically by name, NPA assignments listed in numerical order, LATA assignments listed in numerical order, Signaling System 7 (SS7) Network Codes and Country Codes sorted alphabetically by country and numerically by codes assigned.

- 3.1 Listing Numerically by NPA (LERG3)
- 3.2 Listing Alphabetically by NPA Name (LERG3)
- 3.3 Listing of LATAs Numerically within Region (LERG5)
- 3.4 Signaling System 7 (SS7) Network Code Assignments (LERG4)
- 3.5 Country Code Assignments (LERG2)
  - 3.5.1 Alphabetical Listing By Country Name
  - 3.5.2 Numeric Listing by Country Code

# 4. Destination Code (LERG6)

This section lists Destination Codes consisting of NPA and Central Office Code (COC) in numerical order within each LATA. It also contains additional information associated with each Destination Code, (e.g., switching entity / POI which often is a COMMON LANGUAGE<sup>®</sup> Location Identification (CLLI<sup>™</sup>)). Refer to Section 1.3 for a glossary of terms and symbols.

- 4.1 Region #1, 100-Series LATAs (formerly NYNEX)
- 4.2 Region #2, 200-Series LATAs (formerly BELL ATLANTIC)
- 4.3 Region #3, 300-Series LATAs (formerly AMERITECH)
- 4.4 Region #4, 400-Series LATAs (formerly BELLSOUTH)
- 4.5 Region #5, 500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)
- 4.6 Region #6, 600-Series LATAs (formerly U S WEST)
- 4.7 Region #7, 700-Series LATAs (formerly PACIFIC TELESIS GROUP)
- 4.8 Independents and OFF SHORE, non-Canadian 800-Series LATAs
- 4.9 Independents, 900-Series LATAs
- 4.C Canada, Part of 800-Series LATAs

COMMON LANGUAGE is a registered trademark and CLLI is a trademark of Telcordia Technologies

# NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

# 5. Switching Entities (LERG7)

This section lists Switching Entities, e.g., End Office, Feature Group B Tandems, Feature Group C Tandems, Feature Group D Tandems, a remote units' serving Host, etc., alphabetically by switching entity / POI within each LATA. It also contains information associated with each switching entity / POI, e.g., Vertical and Horizontal Coordinates (VC & HC). Refer to Section 1.3 for a glossary of terms and symbols.

- 5.1 Region #1, 100-Series LATAs (formerly NYNEX)
- 5.2 Region #2, 200-Series LATAs (formerly BELL ATLANTIC)
- 5.3 Region #3, 300-Series LATAs (formerly AMERITECH)
- 5.4 Region #4, 400-Series LATAs (formerly BELLSOUTH)
- 5.5 Region #5, 500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)
- 5.6 Region #6, 600-Series LATAs (formerly U S WEST)
- 5.7 Region #7, 700-Series LATAs (formerly PACIFIC TELESIS GROUP)
- 5.8 Independents and OFF SHORE, non-Canadian 800-Series LATAs
- 5.9 Independents, 900-Series LATAs
- 5.C Canada, Part of 800-Series LATAs

# 6. Rate Centers and Localities (LERG8)

This section lists Rate Centers and their associated Locality abbreviations by LATA. It also contains additional information associated with each Rate Center, e.g., Rate Center VC & HC. Refer to Section 1.3 for a glossary of terms and symbols.

- 6.1 Region #1, 100-Series LATAs (formerly NYNEX)
- 6.2 Region #2, 200-Series LATAs (formerly BELL ATLANTIC)
- 6.3 Region #3, 300-Series LATAs (formerly AMERITECH)
- 6.4 Region #4, 400-Series LATAs (formerly BELLSOUTH)
- 6.5 Region #5, 500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)
- 6.6 Region #6, 600-Series LATAs (formerly U S WEST)
- 6.7 Region #7, 700-Series LATAs (formerly PACIFIC TELESIS GROUP)
- 6.8 Independents and OFF SHORE, non-Canadian 800-Series LATAs
- 6.9 Independents, 900-Series LATAs
- 6.C Canada, Part of 800-Series LATAs

# NOTICE

# 7. Tandem Homing Arrangements (LERG9)

This section lists switches that are "homed" to (e.g. tandems), e.g., Feature Group B, Feature Group C, Feature Group D, Host switches, Operator Services Tandems, Service Switching Point Tandems, 800 SSP Tandems, and their subtending end offices. This information is sorted alphanumerically in order of LATA, "tandem", and NPA/COC. It includes additional information such as status, effective date, switch identification, equipment type, and the originating and termination functions of the tandem. Refer to Section 7 for complete data field Listing and Section 1.3 for a glossary of terms and symbols.

- 7.1 Region #1, 100-Series LATAs (formerly NYNEX)
- 7.2 Region #2, 200-Series LATAs (formerly BELL ATLANTIC)
- 7.3 Region #3, 300-Series LATAs (formerly AMERITECH)
- 7.4 Region #4, 400-Series LATAs (formerly BELLSOUTH)
- 7.5 Region #5, 500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)
- 7.6 Region #6, 600-Series LATAs (formerly U S WEST)
- 7.7 Region #7, 700-Series LATAs (formerly PACIFIC TELESIS GROUP)
- 7.8 Independents and OFF SHORE, non-Canadian 800-Series LATAs
- 7.9 Independents, 900-Series LATAs
- 7.C Canada, Part of 800-Series LATAs

# 8. Operator Services (LERG10)

This section lists operator access codes ordered by NPA/NXX.

- 8.1 Region #1, 100-Series LATAs (formerly NYNEX)
- 8.2 Region #2, 200-Series LATAs (formerly BELL ATLANTIC)
- 8.3 Region #3, 300-Series LATAs (formerly AMERITECH)
- 8.4 Region #4, 400-Series LATAs (formerly BELLSOUTH)
- 8.5 Region #5, 500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)
- 8.6 Region #6, 600-Series LATAs (formerly U S WEST)
- 8.7 Region #7, 700-Series LATAs (formerly PACIFIC TELESIS GROUP)
- 8.8 Independents and OFF SHORE, non-Canadian 800-Series LATAs
- 8.9 Independents, 900-Series LATAs
- 8.C Canada, Part of 800-Series LATAs

NOTICE
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

# 9. Operator Services (LERG11)

This section lists operator access codes listed by state/locality.

- 9.1 Region #1, 100-Series LATAs (formerly NYNEX)
- 9.2 Region #2, 200-Series LATAs (formerly BELL ATLANTIC)
- 9.3 Region #3, 300-Series LATAs (formerly AMERITECH)
- 9.4 Region #4, 400-Series LATAs (formerly BELLSOUTH)
- 9.5 Region #5, 500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)
- 9.6 Region #6, 600-Series LATAs (formerly US WEST)
- 9.7 Region #7, 700-Series LATAs (formerly PACIFIC TELESIS GROUP)
- 9.8 Independents and OFF SHORE, non-Canadian 800-Series LATAs
- 9.9 Independents, 900-Series LATAs
- 9.C Canada, Part of 800-Series LATAs

# 10. Location Routing Number (LERG12)

This section lists Listing of Location Routing Numbers (LRNs) by LATA.

- 10.1 Region #1, 100-Series LATAs (formerly NYNEX)
- 10.2 Region #2, 200-Series LATAs (formerly BELL ATLANTIC)
- 10.3 Region #3, 300-Series LATAs (formerly AMERITECH)
- 10.4 Region #4, 400-Series LATAs (formerly BELLSOUTH)
- 10.5 Region #5, 500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)
- 10.6 Region #6, 600-Series LATAs (formerly U S WEST)
- 10.7 Region #7, 700-Series LATAs (formerly PACIFIC TELESIS GROUP)
- 10.8 Independents and OFF SHORE, non-Canadian 800-Series LATAs
- 10.9 Independents, 900-Series LATAs
- 10.C Canada, Part of 800-Series LATAs

NOTICE
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

# 1. LERG Routing Guide

# 1.1 General

The LERG Routing Guide provides routing data obtained from the Telcordia<sup>TM</sup> Business Integrated Routing and Rating System (BIRRDS) into which data is entered by Local Service Providers (LSPs) and/or their agents. The LERG Routing Guide reflects information contained in the UNDERLYING Telcordia database as of the run date of the LERG Routing Guide production cycle. With few exceptions, close of business on the last working day of a month is the basis for the LERG dated the first of the following month.

The LERG Routing Guide reflects the "current" state of active network data and also reflects "future" activity within the North American Numbering Plan (NANP), as reported by LSPs. "Future" activity should be reported in line with industry notification timeline guidelines, but ultimately is the responsibility of each LSP. With the exception of NPA (Area Code) split data (that may be entered with a substantial lead time), most changes encompass activity to occur within the next 6 month, although, technically, data can be reported as far in the future as a provider may deem reasonable and permissible within any applicable guidelines that may pertain to the data elements. It is important to understand that future data will appear in the LERG Routing Guide with an effective date, each month, until the date has passed. Also, users of the LERG Routing Guide should view future activity (as well as the current network state), to be a complete replacement of previously reported activity (i.e. the removal, addition, or change to future information from one LERG Routing Guide to the next is not flagged).

The Table of Contents of this document describes the various sections in the Paper LERG Routing Guide. In data versions of the LERG Routing Guide, Section 1 corresponds to the LERGINFO.DOC file provided on the CD. Companies receiving the LERG Routing Guide as transmitted over NDM (Network Data Mover (aka Connect:Direct™)) may request a copy of this document be emailed to them by calling the Telcordia Routing Administration (TRA) Customer Service Center on 866-NPA-NXXS (i.e. 866-672-6997) or (732) 699-6700, or may download a copy from www.trainfo.com (documents).

Please note that any references to "Sections" beyond Section 1 pertain to the *paper* version of the LERG Routing Guide. When appropriate, cross-reference is made to LERG Routing Guide data files (e.g. LERG1, LERG2, etc.).

# 1.2 LERG Routing Guide Structure

The Paper LERG Routing Guide is divided into Sections that consist of Destination Codes (i.e. NPA NXXs) (Section 4), Switching Entities (Section 5), Rate Centers and Localities (Section 6), Tandem Homing Arrangements (Section 7), and Operator Services (Sections 8 and 9) and Location Routing Numbers (Section 10). These sections are further subdivided by LATA and may be ordered by Regional "volume", as listed below. The data versions of the LERG Routing Guide contain data for the entire NANP (i.e. data for all regions in provided in the data versions of the LERG Routing Guide). Note that the term "formerly" below refers to former titles of the specific volumes and refer to the Regional Bell Operating Companies (RBOCs) as existed in 1984.

NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

REGION	NAME	LATAs				
(VOLUME)						
1	100-Series LATAs (formerly NYNEX)	120 130 138	122 132 140	124 133	126 134	128 136
2	200-Series LATAs (formerly BELL ATLANTIC)	220 230 240	222 232 242	224 234 244	226 236 246	228 238 248
3	300-Series LATAs (formerly AMERITECH)	250 320 328 338 348 358 368	252 322 330 340 350 360 370	254 324 332 342 352 362 374	256 325 334 344 354 364 376	326 336 346 356 366
4	400-Series LATAs (formerly BELLSOUTH)	420 430 440 44813 45009 45204 456 45808 464 474 482 492	422 432 442 44814 45010 45205 45601 460 466 476 484	424 434 444 44815 45011 454 458 46017 468 477 486	426 436 446 44816 45012 45402 45806 46018 470 478 488	428 438 448 450 452 45403 45807 462 472 480 490
5	500-Series LATAs (formerly SOUTHWESTERN BELL TELEPHONE)	520 528 538 548 558 568	521 530 540 550 560 570	522 532 542 552 562	524 534 544 554 564	526 536 546 556 566
6	600-Series LATAs (formerly US WEST)	620 632 640 652 664 674	624 634 644 654 666 676	626 635 646 656 668	628 636 648 658 670	630 638 650 660 672
7	700-Series LATAs (formerly PACIFIC TELESIS GROUP)	720 728 738	721 730 740	722 732	724 734	726 736

#### NOTICE

<b>REGION</b>	NAME	LATAs				
(VOLUME)						
8	OFF SHORE AND INTERNATIONAL	820 . 830	822 832	824 834	826 836	828
C	CANADA	888				
9	INDEPENDENTS	920 927 937 952 961 977	921 928 938 953 963 978	922 929 939 956 973 980	923 930 949 958 974 981	924 932 951 960 976 999

TELCORDIA TECHNOLOGIES

#### LERG Routing Guide FORMAT

General formats of the Paper LERG Routing Guide:

- Sections are numbered consecutively beginning with Page 1 within each section.
- Section Title appears in the top center of each page.
- The paper version of the LERG Routing Guide does not contain all the data files and/or data elements in specific files that may appear in the more comprehensive data versions of the LERG Routing Guide.

General formats of the Data LERG Routing Guide:

- LERG Routing Guide "files" are numbered (e.g. LERG1 = OCN Information), with files containing the same number, containing variations or extensions of closely related data (e.g. LERG8 and LERG8LOC).
- Specific file layouts are provided in the LERGSPEC.DOC file provided with the LERG Routing Guide CD. Copies of this file can be also downloaded from <a href="https://www.trainfo.com">www.trainfo.com</a> (documents).
- LERG Routing Guide CD data in Microsoft Access<sup>®</sup> files may have data in some data files provided in a different sequential and/or sort order than described in LERGSPEC. Column headings in the LERG Routing Guide CD may also differ slightly from the wording in LERGSPEC and from the paper version of the LERG Routing Guide. Filler space is shown in the Access tables.

#### LERG Routing Guide DATA FILE OVERVIEW

#### LERG1

The LERG1 file provides high-level information about Operating Company Numbers (OCNs) such as name and type of company. This includes the contact information as provided to TRA. Note that contact information is maintained as best as possible, however, due to constant changes in personnel in a company as well as reorganizations, mergers, acquisitions, etc., some information may not be completely accurate. Also, the contact noted may not necessarily be familiar with all aspects of a company's operation (network, billing, etc). The contact name defaults to the party requesting the assignment of the number used as the OCN unless the company has specifically requested the given party be listed for purposes of addressing LERG data. The OCN value (e.g. 1234) can be used to link with other files that contain an OCN should the information in this file (e.g. Company Name) be desired in an output result.

#### LERG1CON

The LERG1CON file is information directly entered by each OCN or its agent. All OCNs will have a SERVICE OF SUBPEONA contact identified (there may not necessarily be a telephone or additional information though). Please note that since these records are established on a per company basis, the extent of information may vary. Maintenance of the data is the purview of the OCN.

#### LERG2

The LERG2 file is independent from all other LERG Routing Guide files. This file contains high-level country Code information (e.g. Republic of Hungary = 36). There is currently no City Code information in this file. The file is provided for your reference in a data format.

## NOTICE THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION, IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.

Copyright © 1984-2003 Telcordia Technologies

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 5 SEPTEMBER 1, 2003

LERG3

The LERG3 file contains high-level information about NPAs (Area Codes). This includes the date the NPA went or is going into effect, permissive dialing periods for splits, the NPA that had previously served the area (or continues to do so in a case of an overly), etc.

LERG4

The LERG4 file contains SS7 "point code" assignments at the network, cluster, or member levels of coding. Network and cluster code assignments provide for a company to assign member level codes on their own. Level of assignment is based on a combination of need/request as well as the specifics about a given company's network. This file simply identifies the company to which the code has been assigned, it does not associated any network elements to any specific point codes.

LERG5

The LERG5 file identifies the NPAs in use within a LATA. The LATA information is then grouped by Region.

LERG6

The LERG6 file contains high level NPA/NXX (central office code) information. Among other things, it identifies the code holder, the Rate Center and associated locality, and the serving switch with associated switch homing arrangement (SHA) Indicator. The LATA identified in this table identifies the LATA of the switch. This may or may not be the same as the Rate Center LATA.

Note that LERG6 data is replicated in the LERG 13 file as "A" Block records.

LERG6ATC

The LERG6ATC file is simply an expansion of data for those records in the LERG6 file that have a COCTYPE value of ATC. This file expands the information by appending the Operator Service "service" codes for each ATC record. Please note that the NPA NXX information (besides the Notes) is *also* included in the LERG6 and LERG13 files.

The LERG6ATC file is only provided in the data versions of the LERG.

LERG6ODD

The LERG6ODD file is simply an expansion of data for those records in the LERG6 file that have COCTYPE values designated as "oddball". This file lists a "notes" field for any ODDBALL NPA NXX record that may have the "notes" field populated. Please note that the NPA NXX information (besides the Notes) is also included in the LERG6 and LERG13 files.

The LERG6ODD file is only provided in the data versions of the LERG.

LERG6INS

SECTION 1 PAGE 6 SEPTEMBER 1, 2003

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

TELCORDIA TECHNOLOGIES

The LERG6INS file represents data entered into BIRRDS after the previous month's LERG was created AND that were effective in that month. For example, data entered in March with a March effective date of activity will appear in the LERG6INS file provided with the April LERG. Please note that the net effect of activity appearing in the file is reflected in the data as it may or may not appear in the current LERG6 file. Depending on the use of the LERG in your company, this file may not be needed, unless the specific date a past activity occurred is important. Beyond that aspect, it can also save as a reference or reconciliation file to address data that many have suddenly appeared changed in the LERG from one month to the next. For additional information, see Insert Files in the Glossary.

#### LERG7

The LERG7 file contains information regarding "switches". Such "switches" are identified by an 11-character code that, with few exceptions, should be a CLLITM code as are trademarked supported by the COMMON LANGUAGE organization in Telcordia Technologies, Inc. Although often termed a "switch", there may be multiple CLLI codes for a single physical switch for various reasons. Such reasons can include the switch performing multiple functions (e.g. as and end office and as a tandem). CLLIs may also reflect a "Point of Interface (POI)" established as the interconnection point between two carrier. Although POIs may be indicated to be at the same location as an actual physical switch, they do not have to be. All assigned CLLIs are *not* listed in the LERG – only those that are relevant to the accessing the local network and routing calls within the local network are included. This file is based on a given "switch" and identifies, to the extent applicable, and as provided by the owning company, a host office, various tandems, Signaling Transfer Points (STPs), the switch location, and V&H coordinates for the location are also among the data elements provided.

#### LERG7SHA

The LERG7SHA file contains information regarding the 'homing' arrangements associated with a given "switch". Homing arrangements include such situations as the Feature Group B, C, and D tandems associated with a switch; STPs; in the case of remotes, their Hosts; in the case of Points of Interface, their ACTUAL SWITCH; etc. This file expands upon the higher-level information about a "switch" that is provided in LERG7.

Note that the SHA IND field is critical in assessing homing arrangements and their application against other LERG data. A given "switch" may have more than one Feature Group B, C, or D tandem, etc., associated with it. This is due to various factors. If/when attempting to identify a specific tandem for a given NXX in LERG6, the "switch" and associated SHA IND in LERG6 must be tied in unison to the same combination in LERG7SHA to determine the appropriate homing.

The LERG7SHA file is only provided in the data versions of the LERG.

#### LERG7INS

The LERG7INS file represents data entered into BIRRDS after the previous month's LERG was created AND that were effective in that month. For example, data entered in March with a March effective date of activity will appear in the LERG7INS file provided with the April LERG. Please note that the net effect of activity appearing in the file is reflected in the data as it may or may not appear in the current LERG7 file. Depending on the use of the LERG in your company, this file may not be needed, unless the specific date a past activity occurred is important. Beyond that aspect, it can also save as a reference or reconciliation file to address data that many have suddenly appeared changed in the LERG from one month to the next. For additional information, see Insert Files in the Glossary.

The LERG7INS file is only provided in the data versions of the LERG.

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 7 SEPTEMBER 1, 2003

#### LERG8

The LERG8 file represents Rate Centers (also known as Exchange Areas). These are geographical areas defined historically and ongoing based on various factors that can vary by state/province. "Boundaries" of a Rate Center may be a section of a large city, boundaries of a specific town, or an area that may encompass multiple towns. Rate center "boundaries" are within state/province boundaries, however, correlation with other factors such as geographical limitations (e.g. rivers), town boundaries, county boundaries, etc., can exist, but are not requirements (these factors may vary by state). In general, Rate Centers historically define an area in which wireline (or wireline to cellular) calls that have originated and terminated within its boundaries (based on NXXs defined to the Rate Center) are considered local (non-toll) calls. However, note that local calls can also extended to other (e.g. adjoining) Rate Centers (information regarding this extension of local calling area is not provided in the LERG).

Rate Centers are generally defined in tariffs filed by principal wireline carriers in the area and are followed by companies that do not need to file tariffs, due to the potential issues surrounding billing that may otherwise occur. Rate Centers also have associated V&H Coordinates, derived from Latitude and Longitude, which are then used to compute distances between Rate Centers. Such distances are a component in determining charges for a call for rate plans that are based on distances.

#### LERG8LOC

The LERG8LOC file identifies "localities" associated with a given Rate Center (LERG8). Often, several "localities" (e.g. towns) are included in a Rate Center. This information can be useful in cases where a town is know and its Rate Center needs to be identified. Note that the localities identified for a given Rate Center is not intended to be a complete listing of each and every defined jurisdiction, alternative name, jurisdictional subsection, etc. that exists within the Rate Center; however the majority of major localities should be identified.

#### NOTE:

(Remaining file descriptions will be added at a later date) – This section is intended to provide a synopsis of the contents and purpose of the various LERG Routing Guide data files.

#### **LERG Routing Guide PRODUCTION**

The LERG Routing Guide is a "snapshot" of a database that is being continuously updated. The database is downloaded during the evening of the last working day of each month to produce the LERG Routing Guide that is dated the first of the following month. Slight variations to the last workday scenario may occur at the end of May and December, depending on when Memorial Day and New Year's Day fall on the calendar, as well as on rare occasions due to other factors.

The LERG Routing Guide is provided in three different manners. The media and their publication schedule are as follows:

• LERG Routing Guide BOOK (paper report format)

8 Volume Set - By LATA grouping, plus a separate volume for Canadian data Produced Quarterly

• NDM (Network Data Mover) (requires dedicated line and NDM software)

Data for entire NANP area Produced Monthly

• CD ROM (data format)

Data for entire NANP area Produced Monthly

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 9 SEPTEMBER 1, 2003

#### LERG Routing Guide ONE-DAY CHANGES

Subscribers to the monthly LERG Routing Guide data may optionally subscribe to a LERG Routing Guide "one-day changes" process. This process assesses daily (calendar day) activity in the underlying database to the LERG Routing Guide and provides resulting "changes" in a format basically consistent with the associated LERG Routing Guide data files that are addressed as part of the process. Six LERG data files are currently addressed by this process (LERGs 1,6,7,7SHA,12,13).

This process identifies "changes" (i.e. new records, changed data, etc.) in a data format. The process does NOT generate a complete file (for the files involved); it only provides information about records that had a change activity. The process does NOT "update" the LERG Routing Guide files directly. Use and incorporation of these changes into internal user processes is the responsibility of each user.

For further information, please call the Telcordia Routing Administration (TRA) Customer Service Center on 866-NPA-NXXS (i.e. 866-672-6997) or (732) 699-6700

TELCORDIA TECHNOLOGIES

#### 1.3 Glossary

The terms, data values, etc., described in this Glossary may pertain to one or more sections (and/or files) of the LERG Routing Guide. Some descriptions are the result of a consensus process through which data providers and recipients have reviewed and concurred with descriptions. In some cases, the nature of the industry is such that a specific description must be kept at a high level to accommodate differences in interpretations, service naming, etc. For the most part, data fields listed in the GLOSSARY are ordered based on their identification as fields in the LERG files as provided in LERGSPEC.DOC.

#### Notes:

- References to files in this glossary that are associated with a "primary" file (e.g. LERG6INS, LERG6ATC, etc. are associated with LERG6) are implied by noting the primary filename.
- Terms listed below are not all just "fields" identified in the LERG. Some appear for information and clarification purposes.
- "Fieldnames" in the Microsoft Access files on LERG Routing Guide CD and references to those fields in the LERGSPEC.DOC file may vary slightly for various reasons.
- Terminology used in the telecommunications industry to describe a situation, data element, service, etc. often various among service providers, regulatory bodies, subscribers, etc. In other cases, definitions may change over time to address clarification, new technology, etc. and may not be carried through to all uses of terms. Please be aware of this in relating LERG data to your needs, data requests, etc. In many cases, there is no one definitive, maintained, and all-inclusive source for definition of telecommunications terms.

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 11 SEPTEMBER 1, 2003

**ACTION** 

 For NPA data, this will indicate an S (split) or O (overlay) that has been taken to address NPA relief needs. (LERG3, Section 3.1)

ACTIVITY CODE

Indicates the activity associated with the transaction being report in the Insert file as indicated below. Can be viewed as indicating what action should be taken regarding the transaction. This is similar to this field as used in the LERG One-Day Changes process, from which this data in the Insert File is generated. (LERG13IN) (See also Insert Files, and DATE OF ACTIVITY)

A = "Add" - An indication of a newly reported ("added") line. This information was not previously reported, or was reported as "R" the previous day or earlier, and has been added back.

R = "Remove" - An indication that the information is to be "removed" at the level of uniqueness. This could be the result of a canceled or rescheduled activity.

U = "Update" - An indication of an "updated" line. Updates are modifications to records at the level of uniqueness (e.g. EFF DATE) THAT WERE PREVIOUSLY REPORTED (either in the previous monthly LERG or with an earlier Date of Activity in the given "Insert" file) but for which data changed

I = "Informational" – An indication of changes that were effective on or before the Activity Date. This most often will apply to certain fields, such as AOCN, that are not date dependent, but that can change values. "I" Activity Codes (as with "A" and "U"), as reported in the "Insert" files, do represent changes that were not previously reported and should be treated as such by those using these files. A record with an "I" Activity Code will always have its Activity Date equal to its EFF DATE and will always reflect dates within the past two months from the LERG month.

NOTE: In the One-Day LERG Changes process, records with an ACTIVITY CODE of "I" indicate that the "current" state of the data has changed from one day to the next. This can occur for two reasons:

1) To indicate that a previously reported intention of change has now become effective. In this case, these lines are not the result of a newly entered change to the data.

#### NOTICE

2) In some cases, data changes are entered to the BIRRDS database with an immediately EFF DATE. As a consequence, the LERG One-Day Changes process has no advance information to have passed on at any earlier date and an "I" ACTIVITY CODE is generated and is the only advice you will receive of the change.

#### "I" ACTIVITY CODE - LERG INSERT Files:

Similar records serve an analogous purpose for the LERG Insert files, however, the first situation noted above are not necessary for the Insert files and usually do not appear. The second situation though, serves a substantive need and is included in the Insert files.

As a result of nuances and anomalies in data processing, a few cases of records due to the first situation cited above may appear in the Insert files. This should not be an issue in that the same data was previously reported.

#### ACTUAL SWITCH ID

The 11-character switch identifier of an actual switching entity. The ACTUAL SWITCH is populated to identify the actual switch for a switch identifier that is not a physical switch but rather is a Point of Interface (POI) to which an NPA NXX has been or may be assigned. The ACTUAL SWITCH may or may not be in the same LATA (or state/province) as some, or all, of its related POIs. (LERG7SHA)

#### ANI II Digit Codes

— Automatic Number Identification Information Indicator Digit Codes. These are two-digit codes that precede the 7 or 10-digit directory number (DN) of the calling line. It informs carriers about the type of line that is originating the call, any special characteristics of the billing number, and/or identifies certain service classes. The two-digit codes and the directory numbers are part of the signaling protocol in equal access offices and are outpulsed by the originating switching system to the receiving office for billing, routing, or special handling purposes.

#### **AOCN**

Administrative Operating Company Number. This identifies the company responsible for the maintenance of a particular record in the database underlying the LERG Routing Guide. If the record administrator has an OCN (Operating Company Number) assignment based on a NECA assigned Company Code, that OCN (or one chosen should multiple Company Code Assignments exist) is generally used as an AOCN value. If the record administrator does not have a NECA assigned Company Code, or chooses not to use it as an AOCN value, TRA may assign a unique OCN for this purpose. (See also OCN) (appears in various files and reports sections – refer to OCN for the actual name of the AOCN).

### ASSIGNEE COMPANY

 For SS7 assignments, this is the name of the company that has been assigned the resource at the given level of assignment.(LERG4, Section 3.4)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 13 SEPTEMBER 1, 2003

ATC

Access Tandem Code - A three digit "NXX/COC" code in the 0/1XX range that uniquely identifies a tandem providing Local Service Provider operator and/or testing access, or a "+" symbol that indicates direct routing to the designated switch in the NPA. (See COCTYPE)

Note that ATC is NOT intended to signify Feature Group B/D tandems that are also often termed "access tandems"

В

See (1) CHANGE SOURCE, (2) SSC, (3) TDM FUNC CODES.

BASIS FOR NPA

— In providing historical NPA information, this indicates the NPA(s) that served as the basis for (immediately preceded) the given NPA in an area. In cases of overlays, some/all of this NPA(s) may still cover the area. (LERG3)

BCR5

An Integrated Service Digital Network (ISDN) Basic Rate Interface (BRI) access capability that allows a customer premise device to communicate directly with the network and/or another ISDN equipped location utilizing an out-of-band signaling protocol and has a data rate of 56Kbps. BRI is two bearer channels, which can be used for voice and data, and one data channel that is used for signaling (2B+D).(SOF Indicator)

BCR6

An Integrated Service Digital Network (ISDN) Basic Rate Interface (BRI) access capability that allows a customer premise device to communicate directly with the network and/or another ISDN equipped location utilizing an out-of-band signaling protocol and has data rates of 56Kbps or 64Kbps clear. BRI is two bearer channels, which can be used for voice and data, and one data channel that is used for signaling (2B+D). (SOF Indicator)

**BIRRDS** 

The Telcordia<sup>™</sup> Business Integrated Routing and Rating System

BLOCK ID

In LERG13, this will contain an "A" for NPA NXX information that is replicated from LERG6. Various NPA NXX records in LERG13 will, in addition to the "A" record, have a numeric BLOCK ID (0-9) identified.

In the case of numeric BLOCK IDs, this correlates to the 1000 line numbers that begin with the BLOCK ID "thousand" (e.g. BLOCK ID 3 correlates to a range of 3000-3999).

Note: A "full set" of BLOCK IDs (i.e. 0-9 all inclusive) should not be assumed in LERG13 – only those assigned as a 'pooled range' or involve NXXs otherwise 'split' and identified by the data provider will be provided. (See TBP IND, BLOCK ID) (LERG13)

**CALL AGENT** 

 A call agent switch provides program and call control to manage distributed high performance network gateway equipment (LERG7,LERG7SHA)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

TELCORDIA TECHNOLOGIES

CAP

Competitive Access Provider - A carrier that provides wireline nonswitched access services as an alternative to a local exchange carrier. Also may be referred to as an Alternative Access Provider (AAP) or by other terms. (See CATEGORY)

**CATEGORY** 

Identifies the "type" of company associated with a Company Code / OCN.
 (LERG1, Section 2.2):

CAP = Competitive Access Provider
CLEC = Competitive Local Exchange Carrier
GENERAL = Various miscellaneous cases

INTL = International
L RESELLER = Local Reseller
IC = Interexchange Carrier

ICO = Independent Telephone Company
INTRALATA = IntraLATA Service Provider

P RESELLER = Personal Communication Services Reseller

PCS = Personal Communications Service RBOC = Regional Bell Operating Company ULEC = Unbundled Local Exchange Carrier

WIRELESS = Wireless Provider (Non-PCS Cellular, Paging, Radio)

W RESELLER = Wireless Reseller

Note: The term "Incumbent" correlates to ICO and RBOC combined.

CCS AC OFC

 A switch whose functionality is that of a switch in the CCS network with Access Capability as outlined in TR-394. (SOF Indicator)

A switching entity with this functionality must have its Signaling Transfer Point fields (STP1 and STP2) populated. An access purchaser can use common channel signaling to a CCS AC OFC.

A switching entity without this functionality may have its STP1 and STP2 fields populated if it is capable of intraLATA common channel signaling. An access purchaser cannot use common channel signaling to an office that is not a CCS AC OFC.

#### NOTICE

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 15 SEPTEMBER 1, 2003

#### **CHANGE SOURCE**

**CIP** 

**CITY** 

CLASS 4/5

The "Change Source" field assists in isolating the "source" of a given change (in conjunction with the STATUS field) in the homing arrangements. The following values will appear in this field whenever a STATUS value is non-blank: (LERG9, Section 7)

DIMI	os value is non-olank. (EERO3, Section 7)				
<u>Value</u>	Description				
D	Destination Code activity only, such as an establishing or disconnecting code or non-switch modification.				
L	Destination Code activity only, where an existing code is moving to a new switch.				
S	Switch activity only, such as the establishment or disconnecting of a switch, or non-homing modification.				
Н	Switch Homing activity only, where an existing switch is being re-homed from one tandem to another.				
В	Cases where Destination Code activity (e.g. D,L) and switch activity (e.g. S,H) occur on the same effective date.				
T	Changes to tandem level data (e.g. establishment, disconnect, or data modification).				
the swi	Identification Parameter is a special option (SOF Indicator) that itch is to transmit the three (3) or four (4) digit CIC of the scribed line back to the customer. (SOF Indicator)				
City na	City name portion of switching entity address. (various files and report				
CLASS	ching entity that performs both a Class 4 and Class 5 function. To 4/5 office is a single processor switching entity that provides lid trunk/toll side capabilities to its end users. (SOF Indicator, 7)				
The Cl	ass 4 function allows the switching entity to perform Tandem ty				

functions, which may include FG B/C/D assess service, and data base query functions, Operator Services functions, etc. It also provides access on a toll basis to all subtending offices below the Class 4 office including

#### NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

Host/Remote arrangements.

The Class 5 function allows the switching entity to perform at the lowest level of switching with the LEC network. This function allows end users to receive dial tone, pass digits for call routing, provide line-side features, such as call waiting, call forwarding, etc. and provides Telephone Number association for terminating calls.

There should be two switch identifiers associated with this switching entity, one for the class 5 functions and one for the class 4 functions with the class 5 switching entity homing on the class 4 switching entity.

**CLEC** 

 Competitive Local Exchange Carrier - A wireline based local exchange (switched and non-switched) carrier serving in a geographical area that is already served by an incumbent local exchange carrier (RBOC or ICO).
 Also referred to by other names including Alternative Local Exchange Carrier (ALEC), Other Local Exchange Carrier (OLEC), Alternate Exchange Carrier (AEC), etc. (See CATEGORY)

**CLN INDICATOR** 

This indicator notes whether the SWITCH value is or is not a valid CLLI (by nature of its being in the Telcordia CLONES<sup>TM</sup> database) on the day before the LERG data was generated (Note: the LERG data is generally generated at close of business on the last business day each month). (LERG7)

A = In CLONES, Active I = In CLONES, Inactive D = In CLONES, Delete N = Not in CLONES

CLUSTER

 Generally viewed as the middle of the three sets of three numbers comprising a point code (NETWORK-CLUSTER-MEMBER) (LERG4)

CNTY (COUNTY)

This is a two-alpha abbreviation that denotes the county in which the associated record resides. This is completed only when more than one record using the same identifying keys exists within a state, otherwise the field is blank. (LERG6, LERG13, LERG8, Sections 4,6)

COC

 Central Office Codes (COC), essentially an NXX, also may be referred to as a Destination Code (various files and sections)

Codes 0/1XX are used for operator access tandem codes and testboard addressing or a "+" symbol that indicates direct routing to the designated operator switch in the given NPA. 2XX-9XX values are considered NXXs. (See ATC)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

SECTION 1 PAGE 17 SEPTEMBER 1, 2003

COC TYPE

 A three-digit code defining the use of the Central Office Code. (LERG6, LERG9, LERG13, Sections 4,7)

ATC = Access Tandem Code (0/1XX)

EOC = End Office Code

PLN = Planned Code - non-routable

PMC = Public Mobile Carrier (Type 2 Interconnected)

RCC = Radio Common Carrier (Dedicated Type 1

Interconnected)

SIC = Special 800 Service Code

SP1 = Service Provider - Miscellaneous Service (Type 1

Interconnected)

SP2 = Service Provider - Miscellaneous Service (Type 2

Interconnected)

TST = Standard Plant Test Code

The following are considered 'ODDBALL' Codes and appear in LERG6 files and LERG13, rarely in LERG9. Oddball Codes often are not associated with a specific LATA (99999 used as a default), Rate Center (XXXXXXXXXX), and/or switch (XXXXXXXXXXX). In many cases, the NXX is not associated within a single OCN (e.g. 911) in which case an OCN value of MULT is used.

AIN = Advanced Intelligent Network

BLG = Billing Only BRD = Broadband

CDA = Customer Directory Assistance only (line number 1212)

(note: other 555 line numbers are assigned by NANPA)

CTV = Cable Television

ENP = Emergency Preparedness FGB = Feature Group B Access

HVL = High Volume

INP = Information Provider LTC = Local Test Code

N11 = N11 Code (e.g. 411, 911)

ONA = Open Network Architecture

PRO = Protected RSV = Reserved RTG = Routing Only

UFA = Unavailable for Assignment 700 = 700 IntraLATA Presubscription

Note: ATC (Access Tandem Codes) used in Operator Services Routing are considered a variation of an ODDBALL Code in that Rate Centers do not apply to them. However, they are not included in the LERG6ODD file as, for reasons of needing to provide Operator Services codes associated with them, they are listed separately in the LERG6ATC file.

#### NOTICE

SECTION 1	
PAGE 18	
SEPTEMBER 1	2003

#### TELCORDIA TECHNOLOGIES

CONTACT FUNCTION, PHONE, INFORMATION	_	This in information maintained directly by the OCN to which it pertains. A specific function is identified as the key to the record, and associated phone and or "other" information is provided. Service of Subpoena exists as the only common function among all companies. (LERG1CON)
COUNTRY		The country to which the code is assigned as listed by the ITU. (LERG2, Section 3.5)
COUNTRY CODE		Code: the ITU assigned Country Code (LERG2, Section 3.5)
CREATION DATE	_	The date the NPA NXX codes were physically created in the underlying database. This only will exist for NPA NXX records have an E STATUS code. (LERG6, LERG13)
CS DATA TDM		Circuit Switch Data Tandem. This defines a tandem office which has the functionality (e.g., BCR5, BCR6, PRI64) to process switched data calls. (LERG7SHA, SOF Indicator)
CSP	_	Carrier Selection Parameter is a special option that provides for the automatic transmission of a signaling indicator that signifies to the customer whether or not a given call originated from a presubscribed line. (SOF Indicator)
D (Disconnect)		See (1) CHANGE SOURCE, (2) EFF DATE / STATUS, (3) TDM FUNC CODES.
DA OFC (Directory Assistance Office)	_	An office that provides the means for customers or operators to obtain listed telephone numbers and addresses. (Accessed via 411, 555+1212 or NPA+555+1212.) (SOF Indicator)
DA TDM (Directory Assistance Tandem)	_	A tandem office that serves as the concentrated distribution point for customers or operators to access a Directory Assistance Office. (Accessed by dialing 411, 555+1212, or NPA+555+1212.) (SOF Indicator)
DATA DOWNLOAD DATE	_	This is the last possible calendar day through which data entry to the underlying database to the monthly LERG Routing Guide could have been made. (LERGEND)
DATE OF ACTIVITY		This is the date (formatted as mmddyy) on which the given activity (defined by Activity Code) was performed in the underlying LERG database. Note that such dates will generally always be the prior month, however, on occasion, the last day(s) of the month prior to that may appear since (1) the process is based on a LERG-to-LERG timeframe and (2) the LERG is processed, with occasional exceptions, at close of business of the last working day each month (which does not necessarily align to the last calendar day of each month). (LERG13IN) (See also ACTIVITY CODE and Leaget Files)

#### NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

and Insert Files)

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 19 SEPTEMBER 1, 2003

DERIVED FROM NPA

In providing historical NPA information, this indicates the previous NPA(s) that existed in the area covered by a given NPA. In cases of overlays, some/all of the previous NPAs may still cover the area. (LERG3)

DIND

 This field reflects whether a code is or is not dialable by the customer or operator. Y= yes, dialable, N= no, not dialable. (LERG6, LERG13, Section 4)

DS

 Central Office Code (COC) STATUS indicator (See D, E or M). A blank indicates the record is currently in effect. (See STATUS)

E (Establish)

 Identifies a record scheduled to be established. See EFF DATE / STATUS.

**EFF DATE** 

The date that a change is to be implemented or effective. The EFF DATE relates to an E, M, or D STATUS code indicating the type of change. With the exceptions of past historical dates in LERG2 and LERG3 and past-month dates in LERG4, all dates are the first day of the month of the LERG or later. Blank values of EFF DATEs indicate the data provided is "current" as of the LERG product date. Date formats are noted in LERGSPEC.DOC and generally are in an mmddyy format. Year dates in LERG3 that are greater than 50 imply 1950+.

NOTE: In the case of NPAs 500 and 900 NXX assignments; EFF DATE indicates the planned effective date of the code as indicated to the Numbering/Dialing Planning Organization by the carrier at the time the specific code(s) is allocated to the carrier.

NOTE: In Insert files the EFF DATE may, on rare occasions (updates with past dates), be the same as the ACTIVITY DATE. Thus, the EFF DATE reported in these files may not correlate to the past EFF DATE in the underlying LERG database (BIRRDS). This occurs when data is updated using an EFF DATE that is earlier than the then current calendar date. (LERG13IN)

#### EMBEDDED OVERLAY NPAs

These indicate cases where a certain NPA may be associated (on a grandfathered basis) with a Rate Center. These cases are often excluded from generic NPA maps, etc. and can cause confusion when actual NXX assignments are being assessed. The intent of identifying these NPAs as "Embedded Overlay" NPAs is to distinguish these from those NPAs in a Rate Center from which ongoing NXX assignments are being made. (LERG8)

END OFC (End Office)

A switching system that establishes line-to-line, line to trunk, and trunk to line connections, and provides dial tone to customers. Lineless Hosts are not considered End Offices. (SOF Indicator)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

TELCORDIA TECHNOLOGIES

**EQPT TYPE** 

 A three-character abbreviation for the switching entity's equipment type (LERG7, Section 5).

Examples:

<u>Abbreviation</u>	Switching Entity Equipment Type
5XB 4E	(AT&T-T) No. 5 Crossbar - 2 wire (AT&T-T) No. 4 ESS
DMT	(Northern Telecom) DMS 10-digital, etc.

The following references are produced by a COMMON LANGUAGE<sup>®</sup>. Both these BRs can be ordered from the COMMON LANGUAGE<sup>®</sup> Customer Service Center by calling (877) 699-5577.

Reference:

820

822

BR-751-100-460

BR-751-100-440

Puerto Rico

Virgin Islands

In the following LATAs, the LERG Routing Guide may not contain switch information and hence the equipment type should not be used.

		622 Virgin Islands
		824 Bahamas
		826 Jamaica
		828 Dominican Republic
		830 Other Caribbean Islands
FG B TDM (Feature Group B Tandem)	_	The tandem switch that serves as the concentrated distribution point for FG B traffic between ICs and end office switches. (LERG7SHA, SOF Indicator).
FG C TDM (Feature Group C Tandem)		A tandem office on which end office switches are homed for originating and/or terminating FG C exchange access service. (LERG7SHA, SOF Indicator)
		FG C provides traditional signaling and is not equipped to provide FBD equal access.
FGD 56	_	A circuit switched service that provides a trunk side FG D connection from the LEC to the IXC and supports a rate adapted 56Kbps data speed utilizing in-band signaling. (SOF Indicator)
FGD 64		A circuit switched service that provides a trunk side FG D connection from the LEC to the IC and support 56Kbps or 64Kbps clear channel capability

COMMON LANGUAGE is a registered trademark of Telcordia Technologies

#### NOTICE

utilizing out-of-band signaling. (SOF Indicator)

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

SECTION 1 PAGE 21 SEPTEMBER 1, 2003

### FG D TDM (Feature Group D Tandem)

 A tandem switch that serves as the concentrated distribution point within the LATA or Sector within the LATA as determined by the LEC for FGD traffic between switching entities and the Interexchange Carriers.

Allows a caller to access a presubscribed IC by dialing 1+10-digit telephone number, and any other IC by dialing the corresponding 101XXXX access code plus the telephone number. Provides trunk side equal access with "1+"/"101XXXX" dialing. Note that in LERG14, the identified switch (record key) is a FG D or OS Tandem. (LERG7SHA, LERG14, SOF Indicator).

FGD ADJ EO (Feature Group D Adjunct End Office) An end office that has an external device (adjunct) that provides equal access service to the subscribers in that office. (SOF Indicator)

**FUNCTION** 

See TDM FUNC CODES

**FOOTNOTE** 

 Where this appears this is providing some additional information about the given data element. It exists to permit flexibility for the data provider to describe unique characteristics of the data

FOOTNOTE CODE

 In the Country Code data, this is a footnote code that should be looked up in the Country Code section of the Glossary. (LERG2)

FGD ADJ TDM (FGD Adjunct Tandem)

 A toll tandem switch equipped with the equipment and software features that allow non-conforming end office to switch traffic to an Interexchange Network as equal access. (SOF Indicator)

**GENERAL** 

See CATEGORY.

Η

See (1) CHANGE SOURCE, (2) TDM FUNC CODES.

HC (Horizontal Coordinate)

A four or five digit number used, in association with the VC, and relate to the geographical location of a Switching Entity / POI. These coordinates are derived from Latitude and Longitude values. The VC and HC are used to measure the airline mileage between like entities, i.e., Switching Entity to Switching Entity.

IMPORTANT: Do not confuse Vertical and Horizontal Coordinates of a switch with those of a Rate Center (See MAJOR RC VC / HC) — they may sometimes be identical, sometimes may not. (Switch V&H: LERG7, Section 5; RC V&H: LERG8, Section 6)

HOST

A switching office that provides certain common processor functions for a remote entity and for the traffic that originates and/or terminates in the remote. (LERG7SHA, SOF Indicator)

HS

 Homing STATUS indicator (See D, E, M). A blank indicates the record is currently in effect. (LERG9, Section 7)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

SECTION 1 PAGE 22 SEPTEMBER 1, 2003

#### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

TELCORDIA TECHNOLOGIES

IAC (Interexchange Access Customer Code)

A four character alphabetic code in the OCN field and is used to identify certain interexchange carriers (primarily NPA 500 and 900). The alpha codes are proprietary, COMMON LANGUAGE® codes assigned by the Telcordia Technologies Language Standards Department.

IC

Interexchange Carrier - a carrier that is authorized by the Federal Communications Commission (FCC) to carry wireline based traffic between Local Access Transport Areas (LATAs). Often referred to a long distance carrier or IC. (See CATEGORY)

**ICO** 

Independent Telephone company - the initial telephone company that
provides wireline local exchange service in a non-RBOC geographical
area. This includes Southern New England Telephone and Cincinnati
Bell, Inc. ICOs and RBOCs are often referred to as the "incumbent" local
exchange carrier. (See CATEGORY).

IDDD (International Direct Distance Dialing)

 A single-alpha value (Y/N) used to indicate whether or not the switching entity has IDDD capability. (LERG7, Section5)

NOTE: Y indicates switch provides direct dialing for international calling. Signaling will be dependent upon the end office capability. Non-equal access offices will utilize two-stage outpulsing. Equal access offices will utilize Feature Group D signaling.

Insert files

 In the data versions of the LERG, "Insert" files exist for LERG6, LERG7, LERG7SHA, LERG12, and LERG13.

Insert files address changes to records in the LERG that were made to the underlying database in the prior month AND had an EFF DATE in the prior month. Such updates are reflected as "current" in the appropriate primary file in the LERG. These Insert files do not reflect a comprehensive monthly LERG to monthly LERG "change file". Use of these Insert files is at the user's discretion, based on how the primary file sis being used, the extent of any need to reconcile near term month-to-month data changes, etc. These files essentially provide a means to reconcile and address changes to current data in the current LERG (new records, lost records, changed records) for which no indication of such occurring was provided in the previous LERG.

COMMON LANGUAGE is a registered trademark of Telcordia Technologies

SECTION 1 PAGE 23 SEPTEMBER 1, 2003

#### LERG13INS:

This data file is structured slightly different from the other Insert files. Please see ACTIVITY CODE and DATE OF ACTIVITY. The information and intent of the other Insert files, as noted above, remains. However, this file also looks at data changes to "future" dates between one monthly LERG and the next. In essence, this is a comprehensive month-to-month data "change" file. As with the other Insert files, use of this file is at the user's discretion, based on the how LERG data is being applied and used. Note that this version of the Insert files, although including "future" activity changes is NOT a comprehensive list

### INTERM OFC (Intermediate Office)

Identifies a switching entity that performs an "intermediate" office/tandem function in certain network architecture arrangements. An "intermediate office" is a switching entity, other than the originating or terminating end office or access tandem, used to assist in the call completion process.
 (SOF Indicator)

#### INTRA PRSUB

 A switching entity that has Dual PIC capability. This allows a subscriber IntraLATA equal access. This gives them the ability to pre-subscribe an IntraLATA Carrier that may be different from their current InterLATA Carrier. (SOF Indicator)

#### **INTRA TDM**

An intra-LATA tandem switch connects one trunk to another and serves as a trunk concentration and distribution function to minimize direct end office interconnection. Intra-LATA tandem traffic can be either intrastate intra-LATA or interstate intra-LATA as defined in the tariffs on file with the appropriate regulatory body. An intra-LATA tandem completes billable toll messages that originate and terminate within the same LATA. A switch that completes intraLATA toll traffic between subtending end offices. (LERG7SHA, SOF Indicator)

#### INTRALATA

 Intra-LATA Toll provider - a company that exists to provide an alternative to Intra-LATA toll services that is provided by local service providers. (See CATEGORY)

#### ISDN FS OFC

ISDN Foreign Serving Office. A single 11-character field that indicates, when appropriate, that ISDN services are available to subscribers in a given office, however, they are actually "served" by the identified "foreign" (i.e. a different) office. (SOF Indicator)

#### ISDN MultiRate

A circuit switched service that allows customers to set up n x 64Kbps (n by 64) calls from an ISDN Primary Rate Interface circuit in real time and in the same manner as any circuit switched ISDN call. ISDN MultiRate is an extension of the 64Kbps service offering in that it can set up a call from 64Kbps to 1,536Kbps (1 DS0 to 24 DS0s) in bandwidth capacity. (SOF Indicator)

#### L

— See CHANGE SOURCE definition.

#### NOTICE

SECTION 1 PAGE 24 SEPTEMBER 1, 2003

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

TELCORDIA TECHNOLOGIES

L RESELLER

 Local Reseller - A company that leases a block of numbers or facilities, in bulk, from a local exchange carrier, for purposes of resale to customers. (See CATEGORY).

LARGE NETWORK

 Used for Signaling System 7 (SS7) Network Code assignments. More than 75 initial signaling points, or 150 projected signaling points within five years. The network must have a Signaling Transport Point (STP) or STP functionality.

LATA

This is the three-digit number that represents the geographical Local Access and Transport Area (LATA), or LATA-like code, in which this particular record is located, e.g., 120 for Maine. Note that some descriptions indicate five spaces for the LATA code. The last two digits are for the LATA sub-zone (in Florida only) which represent Equal Access Exchange Areas (EAEAs). (Various files and sections)

NOTE: In some cases, i.e., where the switch serves COCs (NXXs) in two LATAs, the LATA entry might be different from the geographical LATA of the switch. This entry identifies the LATA and, therefore, the Point of Interface (POI) to which Interexchange Carriers deliver traffic for access to the COCs (NXXs) assigned to the particular switch. (Various files and sections)

NOTE: When dealing with LATAs, note that it is possible, depending on circumstances, for a switch to be in one LATA and its tandems in another; that an NXX may be associated with a Rate Center that is in one LATA, but is served by a switch in another LATA. Although LATAs in the majority of cases are all coincident, it is nonetheless important to ensure you are clear as to what data you are referring to when attempting to associate LATAs to it.

NOTE: LATA 99999 may be found for some records. These are generally cases of ODDBALL NXXs or associated data where the data is not necessarily associated with a single LATA.

LATA NAME

 The name of the Local Access and Transport Area (LATA), or LATA-like code, e.g., Maine. (various files and sections)

**LERG** 

The Telcordia<sup>™</sup> LERG<sup>™</sup> Routing Guide

LERG FILE NUMBER

An eight-character value that signifies the specific LERG Routing Guide file that associated information in LERGEND is provided for. (LERGEND)

#### NOTICE

SECTION 1 PAGE 25 SEPTEMBER 1, 2003

LINES FROM/TO

Two four-digit elements representing numbers served by the associated switching entity for the NPA NXX, i.e., both working and spare. The first four digits represent the starting number in the block of numbers. The last four digits represent the last number in the block of numbers. In LERG6 the FROM will be 0000 and TO will be 9999 with the exception of NXX 555 which will have 1212 and 1212 respectively. In LERG13 the "A" Block should always be as noted for LERG6, while numeric blocks 0-9 should be 0000-0999, 1000-1999, etc. where the first digit of the FROM and TO is the same as the BLOCK ID. Note that a "full set" of BLOCK IDs (0-9) should not be assumed, therefore a full complement of ranges equating to 0000-9999 should not be assumed for NXX records that have numeric BLOCK IDs in LERG13. (See TBP IND, BLOCK ID) (LERG6, LERG13, Section 4)

LNP CAPABLE

 LNP (Local Number Portability) Capable signifies the switch is able to process SS7 LNP messages. (SOF Indicator)

LOCAL TDM

— A Local Exchange Carrier (LEC) switching system, specifically identified as a Local Tandem in the LERG Routing Guide, which provides a traffic concentration and distribution function for local traffic originating and/or terminating within a local calling area as defined in the state tariff(s) on file with the appropriate regulatory body. A Local Tandem provides trunk-to-trunk connections to more than one end office within a local calling area.

Although interconnection at more than one Local Tandem may be required to provide access to all end offices within a local calling area, only the "homing" or "subtending" interconnection is reflected in the LERG Routing Guide. Also, there may be end offices that do not subtend nor interconnect with a Local Tandem.

A host/remote scenario does not constitute a Local Tandem homing arrangement. Nor should an office be considered a Local Tandem if local traffic is routed to that office solely for emergency or special routing arrangements, e.g., Type 2A Interconnected wireless. (LERG7SHA, SOF Indicator)

LOCALITY

 This is the name of the locality served by a COC. The locality entered often is what appears as the called place on a customer's bill. (LERG6, LERG13, LERG8LOC, LERG11, Sections 4.6.9)

NOTE: The Locality Field may consist of ten characters. In those cases where the Locality name exceeds ten-characters it has been abbreviated. LERG8LOC has a mapping of the 10-character Locality name to a spelled out max of 50 characters.

LOCATION (NPA)

This is the NANP assigned name of the NPA, e.g., Maryland (301) (LERG3, Sections 3.1, 3.2).

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

LRN

 Location Routing Number used in support of Local Number Portability. (LERG12, Section 10)

LRN Type

LRN Type field provides the capability to distinguish between LRN types.
 ("P" = primary, "M" = maintenance). Actual use of these fields may vary by company. This is not a standardized field in LNP processes.
 (LERG12, Section 10)

LS

Location Routing Number (LRN) STATUS indicator. (LERG12, Section 10)

M (Modify)

 A modification that is expected to occur to a current or future establishing record. See EFF DATE / STATUS (various files and sections)

MAJOR RC-VC

Major Rate Center Vertical Coordinates. A five-digit number used with the RC-HC (Rate Center Horizontal Coordinates) to pinpoint the location of a Rate Center. The V&H Coordinates of two Rate Centers can be used to calculate the airline mileage between them. Major V&H Coordinates are used to rate Message Telephone Service (MTS) calls when the calling and called NPA/NXXs are in Rate Centers that are farther apart than a number of airlines specified in the billing company's tariff. (See also MINOR RC-VC.) Note that if a company does not specify in their tariff the conditions for using major and minor Rate Center V&H coordinates, the major coordinates are used in all cases. (LERG8, Section 6)

<u>IMPORTANT</u>: Do not confuse Vertical and Horizontal Coordinates of a switch with those of a Rate Center (See VC / HC) – they may sometimes match, sometimes may not. (Switch V&H: LERG7, Section 5; RC V&H: LERG8, Section 6)

MAJOR RC-HC

 Major Rate Center Horizontal Coordinates. See MAJOR RC-VC (Major Rate Center Vertical Coordinates) (LERG8, Section 6)

**MEMBER** 

 Generally viewed as the last of the three sets of three numbers comprising a point code (NETWORK-CLUSTER-MEMBER) (LERG4).

Note: Assignments made by for small companies are done in sets of 4 four numbers defined by member-from and member-to.

MINOR RC-VC

Minor Rate Center Vertical Coordinates. A five-digit number used with the RC-HC (Rate Center Horizontal Coordinates) to pinpoint a Rate Center. The V&H Coordinates of two Rate Centers can be used to calculate the airline mileage between the two Rate Centers. Minor V&H Coordinates are used to rate Message Telephone Service (MTS) calls when the calling and called NPA/NXXs are in Rate Centers that are closer together than a number of airline miles specified in the rating company's tariff. (See also MAJOR RC-VC.) (LERG8, Section 6)

MINOR RC-HC

 Minor Rate Center Horizontal Coordinates. (See also MINOR RC-VC) (LERG8, Section 6)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 27 SEPTEMBER 1, 2003

**NANP** 

The North American Numbering Plan. This covers a group of countries (United States and some of its territories, Canada, and certain islands in the Atlantic and Caribbean) that follow a common numbering plan in the generic form of 1-NPA-NXX-xxxx. The NANP has also been referred to as World Zone 1 within the World Zones defined by the International Telecommunications Union (ITU).

**NANPA** 

North American Numbering Plan Administration/Administrator. NANPA administers assignments of certain codes (e.g. CIC Codes, 555 Line Number Assignments, etc.) for the countries that comprise the North American Numbering Plan. NANPA also serves as a centralized CO Code Administrator (assignments of NXXs) to companies serving areas of the United States and United States Territories that participate in the NANP.

**NETWORK** 

 Generally viewed as the first of the three sets of three numbers comprising a point code. (NETWORK-CLUSTER-MEMBER) (LERG4)

**NPA** 

 The Numbering Plan Area code is the first three digits of the Destination Code. The NPA, combined with "the Central Office Code (COC)", is the Destination Code being reported. (various files and sections)

NXX

— In the LERG Routing Guide, this may also be referred to as a Central Office Code (COC) or as a Destination Code. NXXs are technically the three digits following the NPA (Area Code) in the numbering schema used by countries participating in the North American Numbering Plan (NANP).

O (Overlay)

An overlay situation is necessary due to substantial telephone number growth in a specific area. A new NPA will be assigned within the same geographic area where an existing NPA exists. This is used in NPA Assignment listings as an "ACTN DESC" (action description). (LERG3, Section 3.1)

OCN (Operating Company Number)

This four-position alphanumeric field is a method for identifying an NPA-NXX code-holder, switching entity company, non-facility-based service providers such as resellers, billing service providers, etc. The term has been defined by TRA and employed in this capacity since 1984. A complete listing of OCNs and the "names" of the companies they refer to are contained in the LERG. (Sections 2.1, 2.2, LERG1) (note: OCN appears in various files and sections)

In most instances, the OCN value will be a NECA (National Exchange Carrier Association)-assigned Company Code. If a company does not require a Company Code, the Telcordia<sup>TM</sup> Routing Administration (TRA) may uniquely assign an OCN for tracking purposes. TRA assignment of OCNs includes, but is not limited to, the following types of situations:

- OCNs of NXXs within Service Access Codes.
- Administrative OCNs (e.g. AOCN-only companies).
- OCNs associated with Access Tandem Codes.

#### **NOTICE**

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

Procedures are in place to ensure that:

- Any company (facility-based or non-facility-based) that needs a OCN should obtain a NECA Company Code as outlined in the NECA Company Code Assignment Guidelines. NECA assignments (new, as well as changes to existing) are forwarded to TRA by NECA. TRA will then use these assignments as the previously mentioned subset of its OCN values. (Contact NECA at 973 884-8355 regarding Company Codes).
- 2. Companies that have been assigned NECA Company Code(s) may use one or more of such codes to represent their data in the LERG.
- 3. OCN lists in TRA databases will include all NECA Company Code assignments, and will include TRA assigned OCNs as noted earlier. Note to avoid confusion with NECA Company Codes that follow an nXXX format (n=numeric, X = alphanumeric), TRA assigned OCNs follow an aXXX format (a=alpha, X=alphanumeric)

The intent of this definition includes:

- 1. To provide for the identification of service providers that are non-facility-based (such as billing service providers) and facility-based.
- 2. To permit TRA identification of companies which have only administrative responsibilities within TRA databases but which have no other need for OCNs or NECA-assigned Company Codes.
- 3. To ensure that there is an exact, 1-to-1 relationship between NECA assigned Company Codes that are used as OCNs (i.e. that all NECA Company Codes comprise a subset of OCNs, and that information and codes pertain to the identical companies).

For database management needs, some OCNs may not correspond to an assigned Company Code:

Gxxx = General - primarily used to identify an AOCN (Administrative Operating Company Number) when the administrative company itself does not provide telecommunications services to subscribers, or cases where the company has assigned Company Codes, but opts to have TRA assign a unique for use as its AOCN value. Gxxx is also used to identify non-OCN or non-AOCN companies requiring query-only access to the underlying database.

Ixxx = Interexchange Carrier, where xxx is an ACNA (Access Customer Name Abbreviation) code - used for IC (Interchange Carrier) assignments of NPA 500 and 900 NXXs and occasionally for operator tandem interfaces.

#### NOTICE

SECTION 1 PAGE 29 SEPTEMBER 1, 2003

Pnnn = PCS (Personal Communication Services) assignments made to companies that do not have an OCN or can otherwise be classified as an Ixxx OCN.

TRAx = Telcordia Routing Administration

Other OCNs may be formatted as: Cxxx (not LERG related), MULT (data applies to multiple companies), NONE (not LERG related), REC1, SNxx (not LERG related), TCAN, UNAS (not LERG related)

#### Notes:

As with certain other data elements provided in the LERG, when using OCN values in reports, cross relating with other information, etc., please ensure you understand the extent and limitations of the data. For example, the company assigned a given NXX may operate that NXX through a switch belonging to another company that, in turn, may have another company as a tandem provider. Therefore, it is critical to understand the nature of data requests, the nature of data provided on other reports, etc., to ensure proper use of the LERG data. (See OVERALL OCN)

OCN NAME

— This is a twenty-character (for abbreviated Operating Company Name value) or a fifty-character (for the full Operating Company Name value) field, e.g., ACKERMAN TEL CO. (LERG1, Sections 2.1,2.2)

ODDBALL Codes — See listing and descriptions under COCTYPE. (LERG6, LERG6ODD)

OFF SHORE — Those locations outside the continental portion of the U.S. that form part of the NANP and are supported by BIRRDS, e.g., Alaska, Hawaii, some

Caribbean Islands.

OPR SVC CODE

An operator-only dialable code assigned for a specific service when used by an operator services subsystem to access operator services outside the originating operators' system. A listing of these codes can be found in Section 1.4, Routing Codes. (LERG6ATC, LERG9ATC, LERG11,

LERG12, Sections 4, 7, 8, 9)

OS TDM (Operator
Services (OS) tandem switch serves as the concentrated
distribution point for providing a host of services that may include toll and
intercept. The OS Tandem is an integral part of the network as it performs
Alternate Billing Services, Automated Coin Telephone Service, Automatic
Message Accounting (AMA) teleprocessing, and Automatic Call
Distribution for operator handling of calls. Note that in LERG14, the
identified switch (record key) is a FG D or OS Tandem. (LERG7SHA,

SOF Indicator)

#### NOTICE

TELCORDIA TECHNOLOGIES

OVERALL OCN

This field identifies the "Overall" Company Code (referred to by TRA as an "Overall" OCN) as assigned by the National Exchange Carriers Association (NECA) for certain companies. Not all OCNs are Company Codes, and not all Company Codes have "Overall" Company Codes, therefore, cases will exist where the OVERALL OCN field is blank.

"Overall" OCNs can be used when attempting to identify OCNs that all may be related to the same "company". However, bear in mind that the term "company" itself is imprecise. Totally separate "companies" may have the same "name", but be operating in different states. Likewise "company" XYZ and XYZ Wireless may corporately be under the same umbrella, but for various reasons, at various times, may be treated as separate "companies". (LERG1)

P RESELLER

PCS Reseller. (See CATEGORY)

PACKET E.164

 Indicates the switch provides intra-LATA X.25 packet ISDN packet data access. Customers are assigned E.164 addresses. (SOF Indicator)

PACKET X.121

Indicates the switch provides intra-LATA X.25 packet data access. Customers are assigned X.121 addresses. (SOF Indicator)

PAIRED CODE

Paired Country Code (aka pseudo-Country Code) (LERG2, Country Code list): a paired Country Code is an AT&T assigned Country Code for non-equal access originated ILDS (International Long Distance Service) calls. These codes provide a 3-digit code for translation. The 3-digits are either the actual 3-digit ITU assigned Country Code, the actual 1-2 digit ITU assigned Country Code filled with leading "0" to ensure a 3-digit code, or 3 totally unrelated digits, e.g., the ITU assigned Country Code for Russia is "7", and the paired Country Code is "007". (LERG2, Section 3.5)

PC (flag)

 Point Code - a nine-digit numeric element used to identify a particular node in the Signaling System 7 (SS7) network. (LERG7, Section 5)

To indicate the existence, non-existence or change in the Point Code the following means of "flagging" will be used:

- If the SWITCH currently, or at a future effective date, does not have a Point Code (or has one "removed"), the current (or future) view of the SWITCH record will contain a blank in the Point Code field.
- If the SWITCH record currently has a Point Code, or will have one placed on it in the future, the "flag" will contain a "P". A "P" will exist on all future views of this record as well, unless the cases above or below apply.
- If a sequential future view of the SWITCH record finds that the previous views (non-blank) value of a Point Code is "changed" to another (non-blank) value, the flag will contain a "C". Unless the view after the "C" has also changed value, the value of the "flag" will revert to a "P".

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 31 SEPTEMBER 1, 2003

**PCS** 

 Personal Communications Service - a company that exists to provide Personal Communications Service to its customers pursuant to FCC Regulations Part 24. (See CATEGORY)

PERMISSIVE DIALING

This is a term used with NPA (Area Code) Splits. Permissive dialing is a period when two dialing situations (dialing the name NXX in two different NPAs; seven/ten digit dialing; etc.) occur simultaneously to arrive at the same terminating point. For purposes of the LERG Routing Guide data, permissive dialing is the period when a subscriber may dial someone using either that person's new or old Area Code (NPA).

**PMC** 

 Public Mobile Carrier Type II Interconnected at the tandem. See COCTYPE. (LERG6, LERG9, LERG13, Section 4)

**PORTABLE** 

A 'Y' in this field indicates that at least one line number in the NPA NXX may be ported either due to Thousands-Block-Number Pooling and/or Service Provider Local Number Portability. Porting involves mapping a given line number to a Location Routing Number (LRN) via the Number Portability Administration Center (NPAC) for routing the call (i.e. the basic a process involved with Local Number Portability (LNP)). (LERG6, LERG13, Section 4).

**PRI 64** 

An Integrated Service Digital Network (ISDN) Primary Rate Interface (PRI) access capability that allows a customer premise device to communicate directly with the network and/or another ISDN equipped location, utilizing an out-of-band protocol and has data rates of 56Kbps, 64Kbps clear, or multiple combinations of 56 or 64Kbps clear. PRI is 23 64Kbps clear channels, which can be used for any combination of voice and data, and one 64Kbps data channel that is used for signaling (23B+D). (SOF Indicator)

RATE CENTER

A Rate Center is technically the approximate midpoint of what is usually called a Rate Exchange Area, although the term Rate Center has also been used synonymously with the geographic area itself. A Rate Center is a point within a uniquely defined Rate Exchange Area from which mileage measurements are determined. Rate Exchange Area and Rate Center information, as well as other aspects (e.g. V&H) are addressed and defined in local exchange tariffs filed with each state commission by local service providers operating in each state. Specifics of which companies file such tariffs, extent of the content, formats, etc., although consistent in several aspects across different states, may vary by state.

Local Calling Area is the basic local area defined for calls within a Rate Center (usually all local) as well as calls from a given Rate Center to other Rate Centers (may be local or toll). This information is NOT in the LERG Routing Guide. Local Calling Area and specifics about expanded/extended Local Calling Areas are defined in state tariffs.

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

TELCORDIA TECHNOLOGIES

RATE CENTER

LERG6 files (Section 4) and LERG13 "map" NPA NXXs (and BLOCK IDs) to Rate Centers. LERG8 files (Section 6) provides information such as Rate Center V&H, Locality names, etc.

NOTE: The RC TYPE field is used to identify Rate Centers requiring special identification. The following are examples of RC TYPEs identifying a particular Rate Center:

Unrestricted

Rate Center provides a range of Tele-

(b = blank)

communications Services and is not restricted to a

specific function.

Suburban Zone (S) Unit established to further define large exchange areas. Suburban Zones apply to large metropolitan areas and may include only the area around a city (e.g., Pittsburgh Suburban Zones) or the city and its

Pittsburgh Suburban Zones) or the city and its surrounding area (e.g., Wheeling Suburban Zones). The exchange area must be large enough to warrant a subdivision of two or more suburban zones. Suburban Zones are assigned a vertical and horizontal coordinate for use in measurements between Rate Centers,

suburban zones or Zoned Cities, in the same manner as Rate Center vertical and horizontal coordinates.

Zoned City (Z)

Unit established to further define large exchange area usually encompassing a city (e.g., New York City).

Each zoned city will be assigned a vertical and horizontal coordinate (identified as the "Major Zone").

In addition, the zoned city will be sub-divided into two or more city zones. Vertical and Horizontal coordinates will be assigned to each city zone to be used in the same manner as suburban zone vertical and horizontal

coordinates.

Restricted

Operator switched non-dialed services, e.g., ring down

(+)

lines.

**RBOC** 

Regional Bell Operating Company - refers to, on a high level, to one of seven corporations created to provide local exchange service as part of AT&T's 1984 divestiture (Ameritech, Bell Atlantic, BellSouth, NYNEX, Pacific Bell, Southwestern Bell, US WEST). On a lower level, this can refer to any one of the 22 "Bell Operating Companies (BOCs) that, in 1984, were incorporated into one of the seven RBOCs. See CATEGORY.

Subsidiaries of the RBOCs and/or BOCs created to support wireless services, competitive local exchange service (i.e. outside their traditional areas), etc., are not included in this definition. These would fall under the appropriate category (e.g. CLEC), as may apply.

RC

Rate Center. (See RATE CENTER)

RC TYPE

Rate Center Type. (See RATE CENTER)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 33 SEPTEMBER 1, 2003

**RCC** 

Radio Common Carrier-Dedicated Type 1 Interconnected at the end office.
 See COCTYPE. (LERG6, LERG13, Section 4)

RECORD COUNT

Count of records in each data file for a given monthly LERG Routing Guide. (LERGEND)

RECORD TYPE

Indicates if a given "line" of data pertains to the "tandem" itself (Record Type = A); ATC codes (if any, using that tandem (B)); to subtending NPA/NXX and switch information (C). (LERG9)

RELEASE DATE

 This is the "product date" of the monthly LERG Routing Guide (i.e. the first of each calendar month). (LERGEND).

REMOTE

 A switching office that is dependent on another office (the "host") for certain common processor functions; usually originating and terminating traffic access for the remote is provided via the host switch.(SOF Indicator, Section 5, LERG7SHA (SWITCH))

RS

 Rate Center status indicator (See D, E, or M). A blank indicates the record is currently in effect. (See STATUS)

S

- (1) See CHANGE SOURCE (LERG9, Section 7)
- (2) See TDM FUNC CODES (LERG9, Section 7)
- (3) Split used in NPA Assignment list as an "ACTN DESC" (Action description) (LERG3, Sections 3.1, 3.2)

Serving Wire Center

The LERG does not contain a specific data element entitled "Serving Wire Center". Use of this term is somewhat ambiguous within the telecommunications industry. It may, depending on definition being used, refer to data that is in the LERG such as SWITCH, or the first 8 characters of the SWITCH identifier. Serving Wire Centers also may be referred to sometimes by "names" which are not identified as such in the LERG.

SHA IND

Switch Homing Arrangement (SHA) Indicator identifies the "homing" arrangement to be used for the NPA/NXX, relative to the entered 11-character switch. If populated with a value between 01 and 99 the combination of the 11 character switch identifier and the 2 digit SHA indicator represent an alternative homing arrangement that must be previously established as an SH2 record within BIRRDS. In correlating the LERG6/13 and LERG7SHA files the SHA value must be used in conjunction with the SWITCH to obtain the appropriate homing for a given NPA NXX. (LERG6, LERG7SHA, LERG13)

SMALL NETWORK

When used with Signaling System 7 (SS7) Network Code assignments.
 Fewer than 75 signaling points. The network must have a Signaling Transport Point (STP) or STP functionality.

SPLIT INDICATOR

This indicator will be set to 'Y' when the associated Rate Center is geographically split across NPA boundaries. Please not that this indicator does not pertain to NPA (Area Code) splits (LERG8).

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

SOF

#### Switching Entity - Office Functionality

This list identifies the functionality that a switching entity has been designated to perform. SOF Indicators are listed in the order they appear in LERG Routing Guide data products. Note that this is intended to identify what functions are (or will be) performed, not necessarily what functions "could be" performed if a specific release, process, etc., were implemented. In the LERG Routing Guide data files, the applicability of a given functionality is noted with an "X" in the field. (LERG7, Section 5)

	FUNCTIONALITY	
<u>SOF</u>	TERMS	DEFINITIONS
1	END OFC	End Office
2	HOST	Host
3	REMOTE	Remote
4	DA OFC	Directory Assistance Office
5	CLASS 4/5	Class 4 And Class 5 Function
6	WIRELESS OFC	Wireless Office
7	FG D ADJ EO	Feature Group D Adjunct End Office
8-11	filler	
12	FG B TDM	Feature Group B Tandem Function
13	FG C TDM	Feature Group C Tandem Function
14	FG D TDM	Feature Group D Tandem Function
15	OS TDM	Operator Services Tandem
16	INTERM OFC	Intermediate Office
17	DA TDM	Directory Assistance Tandem
18	911 TDM	911 Tandem
19	FG D ADJ TDM	Feature Group D Adjunct Tandem
20	LOCAL TDM	Local Tandem
21	INTRA TDM	IntraLATA Tandem
22	CS DATA TDM	Circuit Switched Data Tandem
23	BCR5	Basic Rate Interface Data Rate Of 56kbps
24	BCR6	Basic Rate Interface Data Rate Of 64kbps
25	PRI 64	Primary Rate Interface
26	ISDN MULTIRT	Integrated Service Digital Network Multirate
27	ISDN FS OFC	Integrated Service Digital Network Foreign Serving Office
28	X.75 GATEWAY	
29	PACKET X.121	

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

30	PACKET E.164	
31-33	filler	
34	STP	Signaling Transfer Point
35	CCS AC OFC	Common Channel Signaling Access Capability Office
36	filler	
37	800 SSP	Switch Can Perform An 800 Database Query
38	LNP CAPABLE	Local Number Portability Capable
39	filler	•
40	filler	
41	filler	
42	CIP	Carrier Identification Parameter (SS7)
43	CSP	Carrier Selection Parameter (SS7)
44	filler	,
45	SW56	Switched 56kbps Service
46	FGD 56	Feature Group D 56kbps Service
47	FGD 64	Feature Group D 64kpbs Service
48	INTRA PRESUB	IntraLATA Presubscribed Service
49	CALL AGENT	Switch is a Call Agent
50	TRUNK GATEWAY	Switch is a Trunk Gateway
51	ACCESS GATEWAY	Switch is an Access Gateway

SP1

Service Provider Type 1. COC TYPE data entry used to identify a
dedicated NPA NXX code assigned to a Service Provider (Type 1
interconnected) offering miscellaneous types of service. Utilizing an NPA
NXX code, the service provider may offer a variety of services to end user
subscribers, e.g., ISDN services, non-500 Personal Communications
Services (PCS), Voice Mail, etc. (See COCTYPE)

SP2

Service Provider Type 2. COC TYPE data entry used to identify a dedicated NPA NXX code assigned to a Service Provider (Type 2 interconnected) offering miscellaneous types of service. Utilizing an NPA NXX code, the service provider may offer a variety of services to end user subscribers, e.g., ISDN services, non-500 Personal Communications Services (PCS), Voice Mail, etc. (See COCTYPE)

SS

 Switching Entity STATUS indicator (See D, E, M or -). A blank indicates the record is currently in effect. (See STATUS)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

SSC

- Special Service Code (SSC) is used in conjunction with the COC TYPE field to further identify special services provided by a Destination Code (NXX) record. (LERG6/9, Section 4/7, LERG13). Allowable codes are:
  - A = INTRA-LATA Use Only
  - B = Paging Services \*\*
  - C = Cellular Services \*\*
  - I = Pseudo 800 Service Code
  - Designates that this NXX has an extended/expanded local
     Calling scope. It is advisable to refer to the state tariffs for
     the Rate Center associated with this NXX.
  - M = Local Mass Calling Code\*
  - N = Not Applicable
  - O = Other (Explanation on notes line of BIRRDS on-line screens only)
  - R = Two-way Conventional Mobile Radio\*\*
  - S = Miscellaneous Services (e.g., non-500 PCS, Voice Mail, etc.)
  - T = Time\*
  - W = Weather\*
  - X = Service Provider requests Local Exchange Company IntraLATA Special Billing Option
  - Z = Service Provider requests SELECTIVE Local
     Exchange Company intraLATA Special Billing Option
  - 8 = Puerto Rico and U.S. Virgin Islands codes
  - \* If different from Public Announcement System (976) code. Also, at this time, use of M, T, and W does not necessarily mean that the entire NXX is used solely for these services.
  - # The digit "8" in the SSC field identifies those codes that are within Puerto Rico and the U.S. Virgin Islands and belong to either WATS Band 4 (for Florida and Rhode Island) or WATS Band 5 (for the remainder of the Continental U.S. portion of the NANP) and must be screened at the WATS originating screening office to pass calls from WATS Band 4 or 5. These codes must be reviewed each month in order to provide up-to-date originating WATS screening.
  - \*\* Note that the information supplied by data providers regarding the "use" of an NXX may vary over time due to a company's line assignments. Such changes are not necessarily conveyed to those maintaining this data. For example, a COC TYPE /SSC combination of EOC C (i.e. shared wireline/cellular) may technically become an EOC N (i.e. wireline only), but the data provider may not be aware that the initial inclusion of some cellular lines may have since changed.

#### NOTICE

SECTION 1 PAGE 37 SEPTEMBER 1, 2003

STATE (ST)

This is the two-letter abbreviation that identifies a state, territory, province, or country (e.g. Caribbean NANP members). The two-letter code is that used in Telcordia COMMON LANGUAGE products. Outside the Untied States' set of two-character state codes, the value used for a location may occasionally be different than two-letter codes used by other sources (e.g. foreign postal services).

A listing of those codes that can appear in the LERG Routing Guide is provided on a table in section 1.3.1 State, Province, Island Code Table.

**STATUS** 

- Used in conjunction with an EFF DATE, the STATUS code indicates a specific type of activity that is to occur on that date. The STATUS label of S, in some cases, may be preceded by a letter (e.g. DS = Destination Code STATUS, SS = Switching Entity STATUS).
  - E = indicates that the specific record is to be "established" in the network on the associated EFF DATE.
  - M = indicates that a record in existence before associated "M" EFF
    DATE will have some data element(s) changed on the "M" EFF
    DATE. To determine the changing element(s) you must compare the
    data, field by field, to the preexisting state of the record (also provided
    in the LERG Routing Guide, usually the preceding line).
  - D = indicates that the specific record is to be "disconnected" from the network on the associated EFF DATE.
  - (b) (blank) = indicates the information provided is "current/active" at the time the LERG Routing Guide was produced.
  - X = LERG Routing Guide "Insert" data files only. Indicates that a
    modify action reported in the prior month's LERG Routing Guide
    ultimately did not occur in the prior month.

STP

 Signaling Transfer Point. A packet switch in the CCS (Common Channel Signaling) network used for SS7 interconnection. (LERG7SHA, SOF Indicator)

If the STP fields are populated (STPs occur in pairs; if one of the STP fields is populated, the other must also be populated), the switching entity has common channel signaling for intraLATA use and, if it is also a CCS AC OFC (See definition in this glossary), it can be used by access purchasers for interLATA common channel signaling.

**STREET** 

Street portion of address in the switching entity address. (various files and reports)

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

SECTION 1 PAGE 38 SEPTEMBER 1, 2003

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

TELCORDIA TECHNOLOGIES

Switch Identifier

See SWITCH

**SWITCH** 

- Also may be referenced as SW IDENT (paper LERG column heading), SWITCH ID, switch, switching entity, etc. The switch is "identified" through use of an 11-character descriptor/identifier. Aside from specific exceptions as denoted below, it is intended that this descriptor/identifier be an established COMMON LANGUAGE® Location Identifier (CLLI™) of the switch. (See CLN INDICATOR). Some of the reasons this field may not contain a CLLI are following:
  - For NXXs in the NPA 500 and NPA 900, the SWITCH field is used to provide assignment, status, and routing information about the NXX (See Sections 1.9 and 1.10 for a more detailed explanation).
  - 2. For NXXs in the Caribbean and Bermuda NPAs, the SWITCH field is populated with SWCHxxUNKNO, where xx identifies one of the countries or territories in the Caribbean or Bermuda.
  - 3. For NPA 710, the SWITCH field is populated with RTGETSAGENT (See Section 1.11)
  - 4. For ODDBALL NXXs, the SWITCH field is often populated with XXXXXXXXXXX as an indication that the "switch" involved may vary based on the type or service provided, due to carriers processing of a given NXX differently that other (e.g. network by network), etc.

Note: In some cases the SWITCH may be a value that represents a "point of interface" (POI) and is *technically* not a "switch". In such cases, it is expected that the data provided has provided a SWITCH as the ACTUAL SWITCH associated with the POI.

Note: "Switch" is a term that has a basic definition of being a network element that will "switch" (e.g. route) call traffic to various other locations based on an assessment of the specifics of the transmission type, numbering protocol, etc., associated with the given call. However, the term has often become used in a loose sense in many areas of telecommunications.

SW 56

 A switched 56Kbps service, generically known as Public Switched Digital Service (PSDS), providing the end user (customer) with the ability to send and receive data at a speed of 56Kbps over the Public Switched Network (PSN), utilizing in-band signaling. (SOF Indicator)

TBP IND

See THOUSANDS BLOCK POOLING INDICATOR

COMMON LANGUAGE is a registered trademark and CLLI is a trademark of Telcordia Technologies

### NOTICE

SECTION 1 PAGE 39 SEPTEMBER 1, 2003

TDM (TANDEM)

A tandem switch connects one trunk to another and serves as a trunk concentration and distribution function to minimize direct end office interconnection. It is an intermediate switch or connection between an originating switch and the final switch call destination. A tandem switch does not allow origination or termination of telephone calls. Tandems serve a designated geographic area consisting of specific rate centers.

Tandem switches may perform one or more of the following functions or homing relationship:

- Feature Group B Tandem (inter/intra LATA)
- Feature Group C Tandem (inter/intra LATA)
- Feature Group D Tandem (inter/intra LATA)
- Operator Services Tandem (inter/intra LATA)

Tandems that serve multi-LATAs have multiple appearances in the Tandem Homing Arrangement Section, (LERG 9, Section 7

In some cases, homing arrangements are provided between a switching entity/POI and the following types of offices. These are not tandems but the homing relationships may be provided in the same manner (e.g. files, etc.) as actual switch/tandem homing:

- Signaling Transfer Points
- End Office Host
- 800 SSP Office
- Intermediate Office
- Actual Switch/POI relationships

TELCORDIA TECHNOLOGIES

### TDM FUNC CODES (TANDEM FUNCTION)

A single character field, which identifies the type of tandem function, performed and whether it performs this function for Originating, and/or Terminating traffic from or to a subtending End Office (LERG9, Section 7). The "field" itself may concurrently contain several of these specific values, as may be applicable since a given switch may perform various functions.

A = Actual Switch

B = Feature Group B Tandem C = Feature Group C Tandem

D = Feature Group D Tandem (i.e. Equal Access tandem)

F = Foreign Served Office

H = Host

I = Intermediate Office

J = Feature Group B Intermediate Office K = Feature Group C Intermediate Office L = Feature Group D Intermediate Office M = Circuit Switched Data Tandem

O = Operator Services Tandem S = Signaling Transfer Point T = IntraLATA Tandem

T = IntraLATA Tandem U = Local Tandem

1 = Signaling Transfer Point 1 (STP1)

2 = Signaling Transfer Point 2 (STP2)

3 = Call Agent homing 4 = Trunk Gateway Homing

8 = 800 SSP

**TEST LINE** 

This permits the data provider to identify the line number component of an NPA NXX test line. This is an optional field at this time. Please be aware that some test lines may be operational only for a specified period and thereafter subject to later assignment to a subscriber. Assignment, use, and other aspects of test line numbers are largely a function of company-specific policies. (LERG6, LERG13)

### NOTICE

SECTION 1 PAGE 41 SEPTEMBER 1, 2003

### THOUSANDS BLOCK POOLING INDICATOR

- Permissible values are Y, N, S, I

Y = Indicates that the NPA NXX has been identified to be part of a pool of NXXs, within a given NPA, that are assigned 1000 lines at a time by the Pool Administrator (currently only applicable to the United States) to potentially different companies. (LERG6, LERG13)

N = Indicates that the NXX is not publicly pooled and that there is no information below the NXX level.

S = Indicates that the NXX is not publicly pooled, but that the service provider has chosen, for purposes of Intra Service Provider (SP) Pooling, seven digit routing, or other reason, to show its fully assigned NXX to be "split" at the thousands block level. This can apply to any NPA within the NANP.

I = Indicates the as "S", however the Pool Administrator has been requested by the Code Holder to establish BIRRDS system controls regarding the "split" of its NXX into thousands blocks. This applies to only NPAs that are in the Pool Administrator's inventory and currently applicable to just FCC regulated areas (U.S. and U.S. Territories).

TIME ZONE

— This field designates the time zone(s) associated with the geographic coverage of the NPA (LERG3):

0 = Not applicable (e.g. NPA 800)

1 = Guam and the

Commonwealth of the Northern Mariana Islands (CNMI)

2 = Hawaii

3 = Alaska/Yukon

4 = Pacific

5 = Mountain

6 = Central

7 = Eastern

8 = Atlantic

9 = Newfoundland (one and a half hours ahead of Eastern)

TOTAL LINES/VIEW

Identifies the TOTAL number of unique lines per VIEW ID. (LERG9)
 (See VIEW ID, VIEW LINE #)

### NOTICE THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,

IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.

Copyright © 1984-2003 Telcordia Technologies

TELCORDIA TECHNOLOGIES

TR DIG

 Note: The following does not apply to NPA NXX records at the Thousands Block Level. TR DIG values associated with numeric block records will appear as NA (Not Applicable).

These fields indicate the number of terminating digits (TR DIGs) to be outpulsed to a switching entity/POI or tandem when completing (terminating) a call (LERG6, LERG13, Section 4). Note that this field, for numeric BLOCK IDS in LERG13 will always be 'NA'. The EO (End Office) field indicates the number of terminating digits required if the call is to be directly routed to the "end office" at which the NPA NXX resides.

The AT (Access Tandem) field indicates the number of terminating digits required if the routing of the call is via the primary access tandem associated in LERG7SHA, LERG9 (Section 7) with that end office.

Both the EO field and the AT field must be populated. Blank entries are not allowed. An "NA" in either the EO or AT field means that the LSP provides for no direct trunking to the switching entity or point of termination (POT) in the LATA.

The entries in the TR DIG fields depend, in part, on the entry in the COC TYPE field. Currently, the following COC TYPE fields are in use:

COC	
TYPE	Description
ATC	Access Tandem Code (0/1XX)
CDA	Customer Directory Assistance (Line
	numbers within the 555 NXX are
	assigned by the North American
	Numbering Plan Administration)
EOC	End Office Code
PLN	Planned (non-routable)
PMC	Public Mobile Carrier (Type 2 Interconnected)
RCC	Radio Common Carrier (Type 1 Interconnected)
SIC	Special 800 Service Code
SP1	Service Provider – Miscellaneous Service (Type 1
	Interconnected)
SP2	Service Provider – Miscellaneous Service (Type 2
	Interconnected)
TST	Standard Plant Test Code

These COCTYPEs can be grouped as follows:

(Group 1) All except TST and ATC. This group includes CDA, EOC, PMC, RCC, PLN and SIC.
(Group 2) TST, and

(Group 3) ATC.

COC

Each of these groups is discussed below.

### NOTICE

SECTION 1 PAGE 43 SEPTEMBER 1, 2003

TR DIG (cont)

### Group 1: All COCTYPEs Except TST and ATC

EO Field: In many cases the required number of digits will be 7 (NXX + Line Number). However, for non-conforming end offices (Feature Group B and C access) and cross-boundary offices, the number of terminating digits required could vary from as few as 4 (just the line number) to as many as 10 (the NPA+NXX+line number). As NPA overlays become more prevalent and as a switching entity may cover a broader geographic area, the need to require 10 digits will expand. Additionally, PMC COCTYPEs may have an "NA" in the EO field and CDA COCTYPEs may have a "0" in the EO field.

AT Field: This field will be populated with either 7 or 10. Only seven terminating digits (NXX + Line Number) are needed if the NPA-NXX being terminated is the same as the Home NPA of the Access Tandem.

This case exists when the Access Tandem serves a single NPA, since no ambiguity exists.

Ten terminating digits (NPA + NXX + Line Number) are needed if the terminating NPA is different from the Home NPA of the Access Tandem. This case exists when the Access Tandem serves two or more NPAs. The three-digit terminating NPA is needed to resolve the ambiguity between an NXX, which is assigned in two or more NPAs, served by a single Access Tandem.

### **Group 2: COC TYPE of TST**

Test codes labeled with a COC TYPE of TST are special use codes. The required number of terminating digits in either the EO or the AT field could range from as few as 3 to as many as 10. Normally, the LERG Routing Guide will reflect the maximum, which will usually be 10, and the correct number to use must be determined through one-on-one discussions.

#### **Group 3: COC TYPE of ATC**

When the COC TYPE is ATC, the call either will be terminated directly at an Operator Service Tandem or will be terminated at an Exchange Carrier's Access Tandem with terminating digits that will identify the Operator Service Tandem to which the call is to be terminated.

**EO Field:** This field will always be NA, since Operator Service Access Tandem Codes, designated by the COC TYPE of ATC, will never terminate at an End Office.

AT Field: If the call is being terminated at an Operator Service Tandem, only the Operator Service Code needs to be outpulsed. Operator Service Codes are either 3, 4 or 5 digits, and vary by company. If the call is being terminated at an Exchange Carrier's Access Tandem and needs to be further routed to an Operator Service Tandem, the three-digit Access Tandem Code (ATC) must be outpulsed as well as the 3, 4 or 5 digit Operator Service Code. Therefore, depending on the company and the type of tandem at which the call is terminating, the entry in this field may be as low as 3 or as high as 8.

#### NOTICE

TELCORDIA TECHNOLOGIES

**V&H** Coordinates

TRUNK GATEWAY

An access gateway provides the line side interface between the Public Switched Telephone Network (PSTN) and the Voice over Packet (VoP) core network. The Trunk Gateway provides an interface between the PSTN digital trunk facility and the VoP core network. (LERG7,LERG7SHA)

 For a more complete definition see HC (Horizontal Coordinate), VC (Vertical Coordinate) and MAJOR RC VC / HC.

VC (Vertical Coordinate)

— For a more complete definition, see HC (Horizontal Coordinate).

**VERSION** 

In Insert files only. This should always be an 'A' however, the field may, on occasion, contain a 'B', etc. You should only have one "version" letter for a given Activity Date. Versions exist should updates to issued activity be required for LERG One-Day Changes users but are not directly pertinent to monthly LERG "Insert" users. (LERG13IN)

VIEW ID

When applicable in data files, this associates an "ID" number with the given "view" of a record. In the LERG9 files, data for a given key/effective date may be broken down further (e.g. subtending switch / NPA NXX combinations). View ID is then intended as a means to identify the "continuation" of the given information across multiple lines. Note that the VIEW ID value may vary month-to-month for a given key and is a tracking vehicle, not specifically a data element associated with the key. VIEW IDs are sequentially assigned based on the actual sort order in the final version of the LERG Routing Guide .dat files. (LERG9) (See VIEW LINE #, TOTAL LINES/VIEW)

VIEW LINE #

 VIEW LINE # tracks the sequential number of "lines" of data for a given VIEW ID. (LERG9) (See VIEW ID, TOTAL LINES/VIEW)

W RESELLER

 Wireless Reseller - a company that leases a block of numbers, in bulk, from wireless carriers, for purposes of resale to customers. Resellers often lease facilities as well. (See CATEGORY)

WIRELESS

 Companies sanctioned to provide local exchange service on a non-wireline (wireless) basis pursuant to FCC Regulations Part 22. This includes cellular companies, paging (beepers) companies, and Improved Mobile Telephone System (IMTS) (radio). (See CATEGORY)

WIRELESS OFC (Wireless Office)

 An interconnection point that provides either or both, originating dial tone and a terminating service to a Wireless subscriber. (SOF Indicator)

WIRELESS TDM (Wireless Tandem)  A tandem supporting a wireless switch for originating and/or terminating traffic. (SOF Indicator)

### NOTICE

TELCORDIA
<b>TECHNOLOGIES</b>

SECTION 1 PAGE 45 SEPTEMBER 1, 2003

X

- (1) When used in the Special Service Code (SSC) field, indicates the dedicated code is assigned to a Service Provider who has requested a LEC IntraLATA special billing option on a LATA-wide basis. IntraLATA toll calls originating from LEC wireline subscribers are billed to the Service Provider as specified by state tariffs. A B, C or R entry, or combinations of B, and/or C, and/or R, and/or S entries should always accompany an "X" entry in the SSC field. (See SSC)
  - (2) Used in all xINS.DAT files to indicate the removal of a previously issued modification. (See STATUS)

X.75 GATEWAY

 Indicates the switch provides interconnection service to interexchange packet data carriers via the X.75 protocol. (SOF Indicator)

Z

When use in the Special Service Code (SSC) field this indicates the dedicated code is assigned to a Service Provider who has requested a LEC IntraLATA special billing option on a SELECTIVE Exchange basis. IntraLATA toll calls originating from LEC wireline subscribers, in SELECTED Exchanges, are billed to the Service Provider as specified by state tariffs. A B, C, or R entry, or combinations of B, and/or C, and/or R, and/or S entries should always accompany a "Z" entry in the SSC field. (See SSC)

ZIP CODE

Identified the ZIP code associated with an address in the United States.
 This would be the Postal Code used in addresses of non-US areas in the NANP.

800 SSP

A switching entity that can launch database queries for originating 800 traffic. This entity can also initiate 800 database queries for other switches that do not have the 800 SSP functionality if the 800 call routes to this switch. (SOF Indicator, LERG7SHA (SWITCH))

911 Tandem

This Switching Office Functionality (SOF) indicator is used to identify a switch that serves as a 911 Tandem. A 911 Tandem provides trunk-to-trunk connections between end offices and a switch that services Public Answering Safety Points (PSAPs).

The specific municipalities and geographic area that the associated 911 service may cover, PSAPs, etc., are not addressed in the LERG Routing Guide at this time. (SOF Indicator)

### NOTICE

### 1.3.1 State, Province, Island Code Table (Based on COMMON LANGUAGE® assignments)

Canada -		United States -		United States (cont'd	)
Alberta	$\mathbf{AB}$	Alabama	AL	Montana	MT
British Columbia	BC	Alaska	AK	Nebraska	NE
Manitoba	MB	Arizona	AZ	Nevada	NE NV
New Brunswick	NB	Arkansas	AR	New Hampshire	NH
Newfoundland	NF	California	CA	New Jersey	NJ
Northwest Territory	NT	Colorado	CO	New Mexico	NM
Nova Scotia	NS	Connecticut	CT	New York	NY
Nunavut Territory	VU	Delaware	DE	North Carolina	NC
Ontario	ON	District of Columbia	DC	North Dakota	ND
Prince Edward Island	PE	Florida	FL	Ohio	OH
Quebec	PQ	Georgia	GA	Oklahoma	OK
Saskatchewan	SK	Hawaii	HI	Oregon	OR
Yukon Territory	YT	Idaho	ID	Pennsylvania	PA
		Illinois	$\mathbf{IL}$	Rhode Island	RI
		Indiana	IN	South Carolina	SC
Mexico -	MX	Iowa	ΙA	South Dakota	SD
		Kansas	KS	Tennessee	TN
* * .		Kentucky	KY	Texas	TX
Islands -		Louisiana	LA	Utah	UT
A 1		Maine	ME	Vermont	VT
American Samoa	AS	Maryland	MD	Virginia	VA
Anguilla	AI	Massachusetts	MA	Washington	WA
Antigua	AN	Michigan	MI	West Virginia	WV
Bahamas Barbados	BA	Minnesota	MN	Wisconsin	WI
Bermuda	BD	Mississippi	MS	Wyoming	WY
British Virgin Islands	BM	Missouri	MO		
Cayman Islands	BV				
CNMI (N. Marianas)	CQ NN				
Dominica	DM				
Dominican Republic	DM DR				
Grenada	GN				
Guam	GU				
Jamaica	JM				
Montserrat	RT				
Puerto Rico	PR				
St. Kitts & Nevis	KA				
St. Lucia	SA				
St. Vincent	ZF				
Trinidad & Tobago	TR				
Turks & Caicos	TC				
US Virgin Islands	VI				

These codes are based on COMMON LANGUAGE assignments and may not correlate to other sources of abbreviations.

### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

### 1.4 Special Routing/NXX Codes

The following codes are identified herein to provide some added information on their use. These "codes", unique NPAs, NXX, or 0/1XX codes exist for specific purposes in the telecommunications industry. Note that *some* of these codes are based on historical usage and that definitive industry documentation confirming the universality of use of some of these assignments may not exist. Further information may be available, in some cases, at <a href="www.nanpa.com">www.nanpa.com</a> and <a href="www.nanpa.com">www.cnac.ca</a>. Their use as described below, may vary by individual service provider, NPA, state/province/country, etc.

### 1.4.1 Special Plant Test Codes (1XX)

This section lists Plant Test routing codes in the 1XX series. Note that other Plant Test or general "test" "codes" may exist as specific NXXs, other specific 0/1XX codes, or specific line numbers within an NXX. They may locally defined by a service provider, may be used for an interim period (e.g. NPA split test numbers), etc.

#### ASSIGNED:

- 100 Balance Termination/Quiet
- 101 Testboard
- 102 Milliwatt Supply
- 103 Signaling Test Termination
- 104 Two-Way Transmission and Noise Checking
- 105 Automatic Transmission Measuring
- 106 CCSA LOOP Around Transmission Test
- 107 Par Meter Generator
- 108 DS-0 Loopback Test System
- 109 ECHO Canceller

### 1.4.2 Service Codes

### **SERVICE CODES (N11)**

Details regarding the implementation, routing, and specific use of the following may vary to some degree by NPA, state/province/country, etc. However, the following are generally accepted designations. Note that N11 codes are identified in LERG data files that involve NPA NXX listings and are classified as a component of "Oddball" codes:

- 211 Community Support and Referral Services
- 311 Non-Emergency Government Services
- 411 Telco Directory Assistance
- 511 Government provided Traffic/Travel/Road condition report
- 611 Telco Repair Service
- 711 Telecom Relay Operator for Hearing/Speech Imparied
- 811 Telco Business Office
- 911 Emergencies (Police, Fire, Ambulance, etc)

### SERVICE ACCESS CODES (SACs)

### ASSIGNED:

- 456 International Inbound
- 500 Personal Communications Services\*
- 600 Canadian Services
- 700 Interexchange Carriers
- 710 U.S. Federal Government Services\*
- 800 Toll Free Service\*\*
- 900 900 Service\*
- \* Information regarding specific assignments in 500 and 900 appear in the LERG NPA NXX data files, as does the primary NXX for 710.
- \*\* 8XX where XX = 22, 33, ..., 88 also exist for Toll Free Service. Through June, 2003 88, 77, 66 are in use while the remaining are reserved for future use.

# NOTICE THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION, IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.

Copyright © 1984-2003 Telcordia Technologies

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

### 1.4.3 NANP Universal Central Office Codes (NXXs)

#### ASSIGNED:

555 - Toll Directory Assistance

Note: LERG Routing Guide information relative to NXX 555 refers to the Directory Assistance aspects of 555 (i.e. line number 1212). Other lines in the 555 NXX are assigned by the North American Numbering Plan Administration (<a href="www.nanpa.com">www.nanpa.com</a>) based on 555 Line Number Assignment Guidelines created by the telecommunications industry and available at <a href="www.atis.org">www.atis.org</a> (INC).

700 - IntraLATA PIC Validation

950 - FGB Access Code

958 - Plant Test

959 - Plant Test

976 - Information Delivery Service

### 1.4.4 Operator Service Codes

121	-	Inward
131	-	Directory Assistance
141	-	Route Desk
160	-	IOC Access
181,11881	-	Toll Station
1150, 11501	-	Universal or Coin Callback
1151, 11511	-	Conference
1152, 11521, 11821	-	Mobile
1153, 11531, 11831	-	Marine
1154, 11541	-	Toll Terminal
1155, 11551	-	T&C Callback (Time and Charges)
1156, 11561	-	Hotel Callback
1157, 11571	-	IOTC Access Trunk
1158, 11581	-	Inward Completion Assistance
1159, 11591	-	Inward Busy Line Verification
1160, 11601	-	Calling Card Validation (Dial Pulse Equipment)
1161, 11611	-	Calling Card Validation (DTMF)
1162, 11621	-	Calling Card Validation (MF- Multifrequency Equipment)

### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

### 1.5 Signaling System 7 (SS7) Network Codes

The Signaling System 7 (SS7) network codes are assigned and administered by Telcordia Technologies acting as maintenance agent for Committee T1 under a contract between Telcordia Technologies and the Alliance for Telecommunications Industry Solutions (ATIS). Questions regarding these assignments should be referred to:

Telcordia Technologies 8 Corporate Place Room PYA-3E127 Piscataway, NJ 08854 732-699-4204

Committee T1 developed and maintains American National Standard T1.111-1988. Chapter 8 (T1.111.8) of the standard, titled "Numbering Signaling Point Codes" describes the format for signaling point codes and the assignment procedures for network codes. Companies wishing to obtain SS7 point codes for their company can also obtain a CCS Point Code application form from <a href="https://www.trainfo.com">www.trainfo.com</a> (documents).

The assignments have been added to the data section of the LERG Routing Guide. For the paper LERG Routing Guide see Section 3.4; for the LERG Routing Guide CD ROM see LERG4.DAT.

Also, see the Glossary for NETWORK, CLUSTER, and MEMBER.

SECTION 1 PAGE 51 SEPTEMBER 1, 2003

### 1.6 Vertical Service Codes

### 1.6.1 Introduction

Vertical Service Codes (VSCs), are customer-dialed codes used to access existing and future vertical services (e.g., Call Forwarding). VSCs are standardized in the format \*XX and \*2XX for touch-tone telephones and 11XX and 112XX for rotary telephones with X = 0 to 9. The North American Numbering Plan Administration (NANPA) assigns VSCs upon request of service providers such as local exchange carriers (LECs) interexchange carriers, commercial mobile radio service (CMRS) providers etc., using guidelines agreed to by the industry and specified in document INC 96-0802-015. VSCs are assigned on a national basis, i.e., a \*XX or \*2XX code assignment is intended to be used for the assigned service anywhere within the North American Numbering Plan (NANP) area. Contained herein is the current list of VSCs that have been assigned by NANP administration, then followed by a brief definition of each service. The list of assigned VSCs will be updated periodically to reflect new assignments.

The primary objective in the assignment of VSCs by NANP administration is to standardize the access codes for services that are deemed universal or national in scope such that users may dial the same access code for a specific service regardless of where or by whom the service is being offered.

Requests for assignment of vertical service codes, or information on VSC assignments should be directed to:

NANPA 46000 Center Oak Plaza Sterling, VA 20166

### 1.6.2 Vertical Service Code Assignments

Table A lists the Vertical Service Codes (VSCs) that have been assigned by NANPA. The \*3 range on this list has been reserved for future expansion of VSCs, therefore, VSCs will not be assigned in this range. A small range of codes (\*94 to \*99) has been set aside for local use, i.e., to be used locally by carriers as appropriate, and no services will be assigned codes within this range by NANP administration.

### TABLE A

<u>Code</u>	Service Assignment
*00	Inward Voice Activated Services (English)
*01	Inward Voice Activated Services (French)
*02	Deactivation/Activation of In-Session Activation(ISA) on a per line basis
*03	Deactivation of In-Session Activation (ISA) on a per call basis
*04	Unassigned
*05	Unassigned
*06	Unassigned
*07	Unassigned
*08	Unassigned
*09	Unassigned
*1X	Unassigned <sup>1</sup>
*2X	Reserved for expansion to a three-digit numeric format (*2XX)
*228	Over-the-Air Service Provisioning
*3X	Reserved for expansion to a three–digit numeric format (*3XX)
*40	Change Forward–To Number for Customer Programmable Call
	Forwarding Busy Line
*41	Six-Way Conference Calling Activation
*42	Change Forward-To Number for Customer Programmable Call
	Forwarding Don't Answer
*43	Drop last member of Six-Way Conference Call
*44	Voice Activated Dialing
*45	Voice Dialing Extended Dial Tone
*46	French Voice Activated Network Control
*47	Override Feature Authorization
*48	Override Doe Not Disturb
*49	Long Distance Signal
*50	Voice Activated Network Control
*51	Who Called Me?
*52	Single Line Variety Package (SVP) - Call Hold
*53	Single Line Variety Package (SVP) – Distinctive Ring B
Code	Service Assignment

<sup>&</sup>lt;sup>1</sup> Vertical Service codes in the \*1X range will be assigned only after all other available \*XX codes have been assigned, i.e., \*0X and \*4X through \*93.

### NOTICE

SECTION 1 PAGE 53 SEPTEMBER 1, 2003

*54	Single Line Variety Package (SVP) - Distinctive Ring C
*55	Single Line Variety Package (SVP) – Distinctive Ring D
*56	Change Forward–To Number for ISDN Call Forwarding
*57	Customer Originated Trace
*58	ISDN Multi Button Key Set (MBKS) Manual Exclusion Activation
*59	ISDN Multi Button Key Set (MBKS) Manual Exclusion Deactivation
*60	Selective Call Rejection Activation
*61	Distinctive Ringing/Call Waiting Activation
*62	Selective Call Waiting
*63	Selective Call Forwarding Activation
*64	Selective Call Acceptance Activation
*65	Calling Number Delivery Activation
*66	Automatic Callback Activation
*67	Calling Number Delivery Blocking/Calling Identity Suppression
*68	Call Forwarding Busy Line/Don't Answer Activation
*69	Automatic Recall Activation
*70	Cancel Call Waiting
*71	Usage Sensitive Three-way Calling
*72	Call Forwarding Activation
*73	Call Forwarding Deactivation
*74	Speed Calling 8 – Change List
*75	Speed Calling 30 – Change List
<b>*</b> 76	Advanced Call Waiting Deluxe
<b>*7</b> 7	Anonymous Call Rejection Activation
<b>*</b> 78	Do Not Disturb Activation
<b>*</b> 79	Do Not Disturb Deactivation
*80	Selective Call Rejection Deactivation
*81	Distinctive Ringing/Call Waiting Deactivation
*82	Line Blocking Deactivation
*83	Selective Call Forwarding Deactivation
*84	Selective Call Acceptance Deactivation
*85	Calling Number Delivery Deactivation
*86	Automatic Callback Deactivation
*87	Anonymous Call Rejection Deactivation
*88	Call Forwarding Busy Line/Don't Answer Deactivation
*89	Automatic Recall Deactivation
<b>*</b> 90	Customer Programmable Call Forwarding Busy Line Activation
<b>*</b> 91	Customer Programmable Call Forwarding Busy Line Deactivation
*92	Customer Programmable Call Forwarding Don't Answer Activation
<b>*</b> 93	Customer Programmable Call Forwarding Don't Answer Deactivation
<b>*</b> 94	Reserved For Local Assignment
<b>*</b> 95	Reserved For Local Assignment
*96	Reserved For Local Assignment
*97	Reserved For Local Assignment
*98	Reserved For Local Assignment
*99	Reserved For Local Assignment

#### NOTICE

### 1.6.3 Definitions of Vertical Service Code Assignments

Table B lists the above services in alphabetical order and provides a brief definition of each service. Underneath the service name are the \*XX service activation and deactivation codes from Table A. These definitions are not intended to be exhaustive, but have been provided to help service providers identify similar services that might be offered within their companies under different names.

#### TABLE B

SERVICE	DEFINITION		
Advanced Call Waiting Deluxe *76	Allows a subscriber to specify, in advance of incoming calls, the termination treatment for calls that arrive while the subscriber is engaged in another conversation		
Anonymous Call Rejection	Allows customers to reject calls from parties who have a privacy		
*77 Activation *87 Deactivation	feature that prevents the delivery of their calling number to the called party		
Automatic Callback	Allows a subscriber to automatically place a call to the last station		
*66 Activation *86 Deactivation	called by the subscriber, when that station becomes idle.		
Automatic Recall	Allows a subscriber to automatically place a call to the last station		
*69 Activation *89 Deactivation	that called the subscriber, when that station becomes idle.		
Call Forwarding	Allows a subscriber to redirect calls intended for his/her station (base station) to another (remote station.)		
*72 Activation *73 Deactivation			
Call Forwarding Busy Line/Don't Answer	Allows a subscriber to forward calls intended for the subscriber's busy line, or idle line after a predetermined number of rings, to another directory number entered by the subscriber at the time of activation.  Provides the subscriber with the directory number of the calling party during the ringing cycle.		
*68 Activation *88 Deactivation			
Calling Number Delivery			
*65 Activation *85 Deactivation			

#### NOTICE

**TELCORDIA TECHNOLOGIES** 

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 55 SEPTEMBER 1, 2003

#### SERVICE

#### **DEFINITION**

Calling Number Delivery Blocking/Calling Identity Suppression

Allows the subscriber to temporarily change the permanent public/private status indicator of his/her director number and thus control its availability to the called party.

\*67

Alternate definition (Calling Identity Suppression):

Allows the subscriber to temporarily suppress delivery of both the caller's directory number and the calling name, independent of permanent status.

Cancel Call Waiting

Provides the subscriber the ability to disable the Call Waiting feature for the duration of a telephone call.

\*70

Change Forward-To Number for Customer Programmable Call Forwarding Busy Line

\*40

Access Code followed by directory number is used to change the forwarded-to number for Call Forwarding Busy Line (CFBL). The state of CFBL is not changed when this access code is used. This feature will utilize the activation codes of \*90 and deactivation code \*91 with the following exceptions: activation will not require/allow the identification of a forwarded-to directory number and deactivation will not clear the forwarded-to directory number.

Change Forward-To Number for Customer Programmable Call Forwarding Don't Answer

\*42

Access Code followed by directory number is used to change the forwarded-to number for Call Forwarding Don't Answer (CFDA). The state of CFDA is not changed when this access code is used. This feature will utilize the activation codes of \*92 and deactivation code \*93 with the following exceptions: activation will not require/allow the identification of a forwarded-to directory number and deactivation will not clear the forwarded-to directory number.

Change Forward-To Number for ISDN Call Forwarding

\*56

\*57

Access code followed by directory number is used to change the Forward-To number for Call Forwarding Variable feature button. The state of Call Forwarding Variable feature button is not changed when this access code is utilized.

**Customer Originated Trace** 

Customer Programmable Call

Forwarding Busy Line

\*90 Activation \*91 Deactivation

Provides the recipient of an obscene, harassing, or threatening call the ability to request a trace of the last call received.

Allows subscriber of the feature to forward calls intended for the subscriber's busy line to another directory number entered by the subscriber at the time of activation. Deactivation will clear the forwarded-to directory number.

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

SECTION 1 PAGE 56 SEPTEMBER 1, 2003

### TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

TELCORDIA TECHNOLOGIES

#### **SERVICE**

Customer Programmable Call Forwarding Don't Answer

\*92 Activation \*93 Deactivation

Deactivation/Activation of In-Session Activation (ISA) on a per line basis

\*02 Activation 03 Deactivation

Distinctive Ringing/Call Waiting

\*61 Activation \*81 Deactivation

Do Not Disturb

\*78 Activation \*79 Deactivation

Drop last member of Six-Way Conference Call

\*43

French Voice Activated Network Control

\*46

#### **DEFINITION**

Allows a subscriber of the feature to forward calls intended for the subscriber's idle line, after a predetermined number of rings, to another directory number entered by the subscriber at the time of activation. Deactivation will clear the forwarded-to directory number.

Allows a subscriber to deactivate or activate (i.e., toggle) the In-Session Activation feature on a per line basis. ISA is a feature that gives the caller a menu of call completion services using voice prompts when the call encounters a busy or no-answer condition.

Allows the subscriber to have incoming calls from a limited number of calling parties identified using distinctive alerting treatment.

Provides the subscriber the opportunity of having all calls intercepted by the Central Office switch whenever the line is programmed for Do Not Disturb. The calling party will receive a message indicating the station is in Do Not Disturb condition.

Provides the subscriber establishing a six-way conference to terminate the last party added to the call. This frees the port for an additional party when the last party was not reachable.

Provides the subscriber access to Voice Activated Network Control (VANC) via the French language. Subscribers will dial this code to access VANC so that they can say a name or command in French that will be activated, deactivated or provide access to a service, e.g., Call Forwarding, Call Trace, etc.

SECTION 1 PAGE 57 SEPTEMBER 1, 2003

#### **SERVICE**

#### DEFINITION

Inward Voice Activated Services

\*00 English

\*01 French

IVAS enables a subscribing business to provide automated voice activated routing for inbound English or French speaking calls (i.e., separate codes for the same service in each language). IVAS will initially consist of the following services:

Voice Activated Premier Dialing (VAPD) that allows customers to contact subscribing businesses by speaking the business name or service.

Voice Activated Blue Pages (VABP) that allows customers to request access to government services.

Voice Activated Auto Attendant (VAAA) that provides enhancements to Auto Attendant applications by providing a voice recognition interface in place of Tough Tone.

Voice Activated Audio Text (VAAT) provides users ability to request specific information from a business.

Voice Activated Interactive Voice Response (VAIVR) that allows the caller to interact with a subscriber's specific application in a prescribed manner.

ISDN MBKS Manual Exclusion

\*58 Activation 59 Deactivation

Access code allows a Multibutton Key Set (MBKS) user or an analog set user whose telephone number is shared on another ISDN MBKS to inhibit other stations from picking up a call on hold or bridging onto a call that is active at the station.

Line Blocking Deactivation

\*82

Allows a caller to dial a delivery feature access code before dialing a complete telephone number to temporarily override the presentation status of both the caller's directory number and the calling name. If the caller enters the delivery code, then the calling identity presentation status will be shown as "public" for both caller directory number and calling name.

Long Distance Signal

\*49

Extended period activation/deactivation (toggle) of basic 1FR/1MR long distance signal ringing/call waiting tones.

Override Feature Authorization

\*47

Allows a subscriber to override a Feature Authorization activated on a line that restricts 1+ calls from that line. Feature Authorization may be overridden by dialing \*47 and a Personal Identification Number (PIN) and then dialing a 1+ call after receiving a second dial tone.

### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

TELCORDIA TECHNOLOGIES

SERVICE	DEFINITION		
Override Do Not Disturb *48	Allows a subscriber to override the Do Not Disturb feature that has been activated on a line. After receiving a message indicating the station is in a Do Not Disturb condition, the subscriber may override the condition by dialing *48 and then a Personal Identification Number (PIN) thus allowing the call to be completed in the normal manner.		
Over-the-Air Service Provisioning *228	OTASP will enable the Service Provider to Activate a potential service to a subscriber's wireless unit by downloading over the air required parameters, such as phone numbers, into the handset. Activation of the OTASP code, followed by supplemental digit strings, also provides the ability to securely load an Authentication Key into a subscriber's wireless phone which is used to confirm and validate the identify of the wireless handset.		
Selective Call Acceptance	Provides the subscriber the ability to block calls from all but a		
*64 Activation *84 Deactivation	predetermined list of directory numbers specified by the subscriber. Unaccepted callers may receive an announcement or be routed to a predetermined directory number.		
Selective Call Forwarding	Allows the subscriber to have incoming calls from a limited number		
*63 Activation *83 Deactivation	of calling parties forwarded to a pre-specified remote station.		
Selective Call Rejection	Allows the subscriber to have incoming calls from a limited number		
*60 Activation *80 Deactivation	of calling parties rejected by the terminating switching system.		
Selective Call Waiting	Provides the subscriber the ability to receive a Call Waiting signal		
*62	when called from a predetermined list of directory numbers specified by the subscriber. Callers not on the predetermined list will receive busy tone.		
Single Line Variety Package (SVP) - Call Hold	Gives the subscriber the capability of placing a call on hold so that the call may be continued from another extension.		
*52			
Single Line Variety Package (SVP)- Distinctive Ring B	Allows a subscriber to select, by way of distinctive ringing, the particular person or extension that the subscriber wishes to alert.		
4.50			

\*53

### NOTICE

**SERVICE** 

## TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

DEFINITION

SECTION 1 PAGE 59 SEPTEMBER 1, 2003

### Single Line Variety Package (SVP)-Allows a subscriber to select, by way of distinctive ringing, the Distinctive Ring C particular person or extension that the subscriber wishes to alert. \*54 Single Line Variety Package (SVP)-Allows a subscriber to select, by way of distinctive ringing, the Distinctive Ring D particular person or extension that the subscriber wishes to alert. \*55 Speed Calling Allows a subscriber to assign his/her own speed calling codes directly and immediately from his/her own telephone by dialing a \*74 Speed Calling 8-Change List change speed calling list access code, an abbreviated code, and a new telephone number. \*75 Speed Calling 30-Change List Usage Sensitive Three-way Calling Allows a subscriber, by dialing an access code, to request the capability of adding a third party to the two-way connection that is **(\*71)** established by subsequent dialing. Voice Activated Dialing Access to the Voice Activated Dialing (VAD) directory. Customers will dial this code to access their VAD directory in order to add, \*44 delete, or review the names and numbers.

Voice Dialing Extended Dial Tone

Voice Activated Network Control

\*45

\*50

Extend dial tone for Voice Activated Dialing (VAD). Customers will dial this code to extend the length of time in which dial tone is heard after going off-hook so that various Customer Premise Equipment (CPE, i.e., fax and modems) will work properly.

Access to Voice Activated Network Control (VANC). Customers will dial this code to access VANC so that they can say a name or

command that will be activated, deactivated or to access a service.

Who Called Me?

(\*51)

Provides the subscriber with the directory number date, and time of unanswered calls.

### NOTICE

### 1.7 Carrier Identification Codes (CICs)

The Carrier Identification Codes (CICs) are assigned and administered by the North American Numbering Plan Administration (NANPA). The CICs are assigned to entities purchasing Feature Group B (FG B) or Feature Group D (FG D) access service. FG B and FG D CICs are assigned from separate pools of numbers so that there are 10,000 numbers available as FG B CICs and a separate pool of 10,000 numbers available as FG D CICs. CICs are used when dialing to reach the entity to which the CIC is assigned. The Feature Group B CICs are used as the XXXX in the format of 950-XXXX. The Feature Group D CICs are used in the format of 101-XXXX.

CICs represent an industry resource and the North American Numbering Plan Administration is charged with their conservation. The assignment of CICs and their conservation is performed under INC document INC 95-0127-006, Carrier Identification Code Assignment Guidelines, Revised September, 1996 (Formerly ICCF 92-0726-002). A copy of the Guidelines can be obtained at <a href="https://www.atis.org">www.atis.org</a> (INC).

A complete list of CIC Assignments can be obtained from the NANPA web site, <a href="www.nanpa.com">www.nanpa.com</a>. Questions can be directed to:

NANPA 46000 Center Oak Plaza Sterling, VA 20166

### 1.8 Automatic Number Identification (ANI) Information Indicator (II) Digits Codes

This section lists and defines the use of ANI Information Indicator Digits Codes. These are two-digit codes which precede the 7 or 10-digit directory number (DN) of the calling line and inform exchange and interexchange carriers about the type line that is originating the call, any special characteristics of the billing number, or certain service classes. The two-digit codes and the directory numbers are part of the signaling protocol in equal access offices and are outpulsed by the originating switching system to the receiving office for billing, routing, or special handling purposes. Further explanation of the signaling protocol can be found in TR-NPL-000258 and TR-NPL-000275.

ANI Information Indicator Digits Codes are assigned by the North American Numbering Plan Administrator (NANPA) at the request of industry forums/associations that have reached consensus that a code is required for a specific application. Further information on the assignment guidelines can be found in AL-87/05-007. Products of the Telcordia Routing Administration (TRA) (e.g., LERG Routing Guide) do not identify these codes by switch.

For further information regarding ANI II assignments please refer to <a href="www.nanpa.com">www.nanpa.com</a>. Questions regarding these codes can also be referred to:

NANPA 46000 Center Oak Plaza Sterling, VA 20166

The following listing identifies all codes (00-99) and provides a definition of the use for those assigned, or an indication that the code is either unassignable, reserved, available for unrestricted use by carriers (codes 40-40), or available for authorized assignment (blank) as described above. For assigned codes, the following Availability Status (As of January 1, 1990) is given:

GA: Generally available. This code is available in the following vendor's switches:

- Northern Telecom, Inc.
- AT&T
- · Seimens AG
- Stromberg Carlson

PD: Pending deployment. No vendor assignment was found.

Information regarding the availability status of these digits is from the perspective of end office generation only and is derived from the current assignments shown by each vendor based on the current Local Switching System Generic Requirements (LSSGR) assignments. Information on vendors other than those shown was not obtainable at this time.

### ANI II ST DEFINITION

00 GA - Plain Old Telephone Service (POTS) - non-coin service requiring no special treatment.

<sup>\*</sup>Telcordia<sup>™</sup> and Telcordia<sup>™</sup> LERG<sup>™</sup> Routing Guide are trademarks of Telcordia Technologies, Inc.

ANI II	ST		DEFINITION
01	GA	-	Multiparty line (more than 2) - ANI cannot be provided on 4 or 8 party lines. The presence of this "01" code will cause an Operator Number Identification (ONI) function to be performed at the distant location. The ONI feature routes the call to a CAMA operator or to an Operator Services System (OSS) for determination of the calling number.
02	GA	_	ANI Failure - the originating switching system indicates (by the "02" code), to the receiving office that the calling station has not been identified. If the receiving switching system routes the call to a CAMA or Operator Services System, the calling number may be verbally obtained and manually recorded. If manual operator identification is not available, the receiving switching system (e.g., an interLATA carrier without operator capabilities) may reject the call.
03-05		_	Unassigned.
06	GA	_	Station Level Rating The "06" digit pair is used when the customer has subscribed to a class of service in order to be provided with real time billing information. For example, hotel/motels, served by PBXs, receive detailed billing information, including the calling party's room number. When the originating switching system does not receive the detailed billing information, e.g., room number, this "06" code allows the call to be routed to an operator or operator services system to obtain complete billing information. The rating and/or billing information is then provided to the service subscriber. This code is used only when the directory number (DN) is not accompanied by an automatic room/account identification.
07	GA	-	Special Operator Handling Required - calls generated from stations that require further operator or Operator Services System screening are accompanied by this "07" code. The code is used to route the call to an operator or Operator Services System for further screening and to determine if the station has a denied-originating class of service or special routing/billing procedures. If the call is unauthorized, the calling party will be routed to a standard intercept message.
0809		_	Unassigned.
10		-	Not assignable - conflict with 10X test code
11		_	Unassigned.
12–19		-	Not assignable - conflict with international outpulsing code

### NOTICE

SECTION 1 PAGE 63 SEPTEMBER 1, 2003

### ANI II ST DEFINITION

GA - Automatic Identified Outward Dialing (AIOD) - without AIOD, the billing number for a PBX is the same as the PBX Directory Number (DN). With the AIOD feature, the originating line number within the PBX is provided for charging purposes. If the AIOD number is available when ANI is transmitted, code "00" is sent. If not, the PBX DN is sent with ANI code "20". In either case, the AIOD number is included in the AMA record.

### 21–22 – Unassigned,

Coin or Non-Coin - on calls using database access, e.g., 800, ANI II 23 is used to indicate that the coin/non-coin status of the originating line cannot be positively distinguished for ANI purposes by the SSP. The ANI II pair 23 is substituted for the II pairs that would otherwise indicate that the non-coin status is known, i.e. 00, or when there is ANI failure.

ANI II 23 may be substituted for a valid 2-digit ANI pair on 0-800 calls. In all other cases, ANI II 23 should not be substituted for a valid 2-digit ANI II pair that is forward to an SSP from an EAEO.

Some of the situations in which the ANI II 23 may be sent:

- Calls from non-conforming end offices (CAMA or LAMA types) with combined coin/non-coin trunk groups.
- Calls
- Type 1 Cellular Calls
- Calls from PBX Trunks
- Calls from Centrex Tie Lines
- PD Code 24 identifies a toll free service call that has been translated to a Plain Old
  Telephone Service (POTS) routable number via the toll free database that originated for
  any non-pay station. If the received toll free number is not converted to a POTS number,
  the database returns the received ANI code along with the received toll free number.
  Thus, this 24 code indicates that this is a toll free service call since that fact can no longer
  be recognized simply by examining the called address.
- Code 25\* identifies a toll free service call that has been translated to a Plain Old
  Telephone Service (POTS) routable number via the toll free database that originated
  from any pay station, including inmate telephone service. Specifically, ANI II digits 27,
  29, and 70 will be replaced with Code 25\*.
- 26 Unassigned.
- 27 GA Coin when it can be determined, at an SSP, from the trunk group that a call is a coin call, but the originating office does not provide ANI from coin lines, code "27" is sent from the SSP to indicate the call is from a coin line.

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

ANI II	ST		DEFINITION
28		_	Unassigned.
29		_	Prison/Inmate Service - the ANI II digit pair 29 is used to designate lines within a confinement/detention facility that are intended for inmate/detainee use and require outward call screening and restriction (e.g., 0+ collect only service). A confinement/detention facility may be defined as including, but not limited to, Federal, State and/or Local prisons, juvenile facilities, immigration and naturalization confinement/detention facilities, etc., which are under the administration of Federal, State, City, County, or other Governmental agencies. Prison/Inmate Service lines will be identified by the customer requesting such call screening and restriction. In those cases where private paystations are located in confinement/detention facilities, and the same call restrictions applicable to Prison/Inmate Service are required, the ANI II digit for Prison/Inmate Service will apply if the line is identified for Prison/Inmate Service by the customer.
30–32		-	Intercept - where the capability is provided to route intercept calls (either directly or after an announcement recycle) to an access tandem with an associated Operator Services System, the following ANI codes should be used:
			PD 30 - Intercept (blank) - for calls to unassigned directory number (DN)
			PD 31 - Intercept (trouble) - for calls to directory numbers (DN) that have been manually placed in trouble-busy state by telephone company personnel
			PD 32 - Intercept (regular) - for calls to recently changed or disconnected numbers
33		_	Unassigned.
34	PD	_	Telco Operator Handled Call - after the Telco Operator Services System has handled a call for an IC, it may change the standard ANI digits to "34", before outpulsing the sequence to the IC, when the Telco performs all call handling functions, e.g., billing. The code tells the IC that the BOC has performed billing on the call and the IC only has to complete the call.
35-39		_	Unassigned.
40-49			Unrestricted Use - locally determined by carrier
50-51			Unassigned.

### NOTICE

SECTION 1 PAGE 65 SEPTEMBER 1, 2003

ANI II	ST		DEFINITION
52	PD	-	Outward Wide Area Telecommunications Service (OUTWATS) - this service allows customers to make calls to a certain zone(s) or band(s) on a direct dialed basis for a flat monthly charge or for a charge based on accumulated usage. OUTWATS lines can dial station-to-station calls directly to points within the selected band(s) or zone(s). The LEC performs a screening function to determine the correct charging and routing for OUTWATS calls based on the customer's class of service and the service area of the call party. When these calls are routed to the interexchange carrier via a combined WATS-POTS trunk group, it is necessary to identify the WATS calls with the ANI code "52".
53–59		_	Unassigned.
60		_	TRS - ANI II digit pair 60 indicates that the associated call is a Telecommunications Relay Service (TRS) call (for the hearing impaired) delivered to a transport carrier from a TRS Provider and that the call originated from an unrestricted line (i.e., a line for which there are no billing restrictions). Accordingly, if no request for alternate billing is made, the call will be billed to the calling line.
61		_	Cellular/Wireless PCS (Type 1) - The "61" digit pair is to be forwarded to the interexchange carrier by the local exchange carrier for traffic originating from a cellular/wireless PCS carrier over type 1 trunks. (Note: ANI information accompanying digit pair "61" identifies only the originating cellular/wireless PCS system, not the mobile directory placing the call.)
62		-	Cellular/Wireless PCS (Type 2) - The "62" digit pair is to be forwarded to the interexchange carrier by the cellular/wireless PCS carrier when routing traffic over type 2 trunks through the local exchange carrier access tandem for delivery to the interexchange carrier. (Note: ANI information accompanying digit pair "62" identifies the mobile directory number placing the call but does not necessarily identify the true call point of origin.)
63		_	Cellular/Wireless PCS (Roaming) - The "63" digit pair is to be forwarded to the interexchange carrier by the cellular/wireless PCS subscriber "roaming" in another cellular/wireless PCS network, over type 2 trunks through the local exchange carrier access tandem for delivery to the interexchange carrier. (Note: Use of "63" signifies that the "called number" is used only for network routing and should not be disclosed to the cellular/wireless PCS subscriber. Also, ANI information accompanying digit pair "63" identifies the mobile directory number forwarding the call but does not necessarily identify the true forwarded-call point of origin.)
64–65		_	Unassigned.

ANI II	ST		DEFINITION
66		_	TRS - ANI II digit pair 66 indicates that the associated call is a TRS call delivered to a transport carrier from a TRS Provider, and that the call originates from a hotel/motel. The transport carrier can use this indication, along with other information (e.g. whether the call was dialed 1+ or 0+) to determine the appropriate billing arrangement (i.e., bill to room or alternate bill).
67		_	TRS - ANI II digit pair 67 indicates that the associated call is a TRS call delivered to a transport carrier from a TRS Provider and that the call originated from a restricted line. Accordingly, sent paid calls should not be allowed and additional screening, if available, should be performed to determine the specific restrictions and type of alternate billing permitted.
6869		-	Unassigned.
70		_	Private Paystations - The ANI II digit pair "70" should be applied to any exchange carrier class of service that is specifically designed to handle calls originating from private paystations (coin and/or coinless), for example public access lines (PAL), customer owned coin operated pay telephone (COCOT), coin operated pay telephone (COPT) lines, etc. Private paystation service will be identified by the customer who owns the paystation when service is initiated.
71–79		_	Unassigned.
80–89		_	Reserved for Future Expansion "to" 3-digit Code
90–92		_	Unassigned.
93	PD	_	Access for private virtual network types of service: the ANI code "93" indicates, to the IC, that the originating call is a private virtual network type of service call.
94		_	Unassigned.
95		_	Unassigned - conflict with Test Codes 958 and 959
96–99		_	Unassigned

# NOTICE THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION, IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.

Copyright © 1984-2003 Telcordia Technologies

### 1.9 Toll-free (e.g. 800) and 900 NXX Code Assignments, Routing Status, Definitions

### 800 (Toll Free) (also pertains to 888, 877, etc.):

Prior to 1993, SAC 800 (i.e. toll-free) NXXs were assigned to entities under an interim plan to permit development of an SMS-800-Database that would provide service-provider number portability. After development was completed, 800 NXXs were moved to the database over a period of time. Currently, all Toll Free NXXs are in the SMS-800-Database except the following (Note that \*XX refers to XX=22 through 88 (as such become activated)):

#### ASSIGNED TO NON-US CARIBBEAN

NXX	Company Assignment	Country
271	Textel	Trinidad
389	Batelco	Bahamas
415	All American Cables	Dominican Republic
534	Bartelco	Barbados
623	Bermuda Tel Co	Bermuda
703		For Future Assignment
740	STSJ Telephone Co	Virgin Islands (in Non-US areas)
744	Cable & Wireless	,
751	Codetel	Dominican Republic
904		For Future Assignment
907	Tricom	Dominican Republic
NXX	Reason	Comment
555	Not available or assignment	800-555 is used for "Toll-free"
911 855 N02 N12	Reserved-use code Hearing impaired Radio Common Carrier use Radio Common Carrier use	Directory Assistance  N=2-9 N=2-9
	271 389 415 534 623 703 740 744 751 904 907 NXX 555 911 855 N02	271 Textel 389 Batelco 415 All American Cables 534 Bartelco 623 Bermuda Tel Co 703 740 STSJ Telephone Co 744 Cable & Wireless 751 Codetel 904 907 Tricom  NXX Reason 555 Not available or assignment 911 Reserved-use code 855 Hearing impaired N02 Radio Common Carrier use

There is no SAC "800" data in the LERG Routing Guide. The numbers <u>not</u> listed above are considered service-provider portable and are in the 800-SMS-Database. That is, any line number in NXXs not listed above are individually obtained and serviced by any sanctioned 800-service provider (one line number may be serviced by one provider, the next number by another). All numbers in any relief for 800 (i.e. 888, 877, 866, etc.) are considered toll-free and are also a component of the "800-SMS-Database" addressed herein. Questions about the numbers listed above should be directed to the North American Numbering Plan Administration (<u>www.nanpa.com</u>). Questions about the numbers in the 800-SMS-Database should be addressed to the Number Administration Service Center (NASC) at 888-767-3300

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

TELCORDIA TECHNOLOGIES

### 900 (information provider - pay services):

The following provides instructions on how to identify the assignment and route status that are associated with 900 NXX codes listed in LATA 999, which can be found in Volume 8, Section 4.9 of the LERG Routing Guide and in LERG6 and LERG13 data files.

The information provided under each column is described as follows:

COLUMN HEADING		DESCRIPTION
EFF DATE	-	The date that the code may be routed.
NPA	-	Identifies the code as a 900 Service Access Code (SAC).
COC	-	Assigned 900 NXX code.
COC TYPE	-	Not applicable.
SSC	-	Not applicable.
DIND	-	Not applicable.
TR DIG	-	These fields indicate the number (quantity) of terminating digits to be outpulsed to a Local Exchange Carrier by an Interexchange Carrier.
OCN	-	The column heading labeled "OCN" (Operating Company Number) is primarily used to identify a Local Exchange Carrier or another Carrier. An entry in this column consisting of four numerals (i.e., 9214, 0124, etc.) would designate a Local Exchange Carrier. Other Carriers are identified in this column by a four character alpha entry with the letter "I" followed by the three letter Access Customer Name Abbreviation (ACNA). Other entries found can include such as "TCAN" for codes that are assigned to TELCOM CANADA. The General Information section of the LERG Routing Guide provides the Carrier Identification Code for each OCN listed.
LOCALITY	-	Not applicable.
CNTY	-	Not applicable.
ST	-	Not applicable.
RATE CENTER	-	Not applicable.
LINES FROM TO	-	Not applicable.

### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

#### **COLUMN HEADING**

### DESCRIPTION

**SWITCH** 

- This column provides various information about the 900 NXX codes, such as the Carrier Identification Code (CIC), the status, or routing restrictions on the codes. The following table provides explanations for the entries in this column:

EXAMPLE OF SWITCH FIELD	EXPLANATION OF THE FIELD	***************************************	
ASSIGNIC222	ASSIGN	=	Assignable
	IC	=	Interexchange
			Carrier
	222	=	CIC
CARIBBEAN00	CARIBBEAN	=	ASSIGNABLE
	00	=	Default Digits
CANADIAN000	CANADA	=	ASSIGNABLE
	000	=	Default Digits
CELLULAR CXR	CELLULAR CXR	=	CELLULAR
			CARRIER
DATABASE110	DATABASE	=	ASSIGNABLE
	110	=	CIC
FROZENIC288	FROZEN	=	FROZEN
	IC	=	Interexchange
			Carrier
	288	=	CIC
INTRALAT722	INTRALAT	=	IntraLATA
	722	=	LATA served
			by NXX
	999	=	NXX Code
			Serves
DEL ETTOLOGO			Multiple LATAs
RTATTCIC288	RT	=	Route To
	ATTC	=	ATT Communications
	IC	=	Interexchange
			Carrier
	288	=	CIC
RCCPAGING00	RCCPAGING	=	Radio Common
			Carrier Paging
	00	==	Default
			Digits
SPECIALDA00	SPECIALDA	=	Special
			Directory
			Assistance
	00	=	Default
			Digits
SPECIALIH00	SPECIALIH		Special

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

	00	=	Impaired Hearing Default	
TELECOMMCAN	Do Not		Digits	
(900 NXX Codes only)	Route - Intra-CANADA Routing Only			

This information will identify the specific assignment and route status that are associated with a 900 NXX Code. If you should receive a request to route 900 NXX calls to a carrier, you have been provided with the following definitions.

The 900 NXX Codes assignment status and their definitions are:

Status	Definition
• Assignable	New assignments of the last 4 digits are possible.
• Canada	Code assigned to a carrier located in Canada.
• Caribbean	Code assigned to a carrier located in the Caribbean.
• CELLULAR CXR	Code assigned to a CELLULAR CARRIER
• Frozen	No new customer assignments are permitted, existing customers may be serviced.
• IntraLATA	Code is for intra-LATA service only. (Restriction only applies to local exchange carriers subject to MFJ)
• Route ATTC	Code is routed to ATTC facilities.
• RCCPAGING	Code assigned to local exchange carriers for Radio Common Carrier Paging Systems. Code is for intra-State service only.
• SPECIAL Directory Assistance	Used for Special Directory Assistance
• SPECIAL Impaired Hearing	Used for Special Impaired Hearing
• TELECOMMCAN	900 NXX Codes used for intra-Canada service.

### NOTICE

Routing information has also been provided for each of the 900 NXX Codes.

Status	Routing Information
• Assignable	May be routed after effective date
• Canada	May be routed after effective date
• Caribbean	May be routed after effective date
CELLULAR CXR	May be routed after effective date
• DATABASE	May be routed after effective date
• Frozen	Route now
• IntraLATA	Route only on an intra-LATA basis (Restriction only applies to local exchange carriers subject to the Modified Final Judgment (MFJ-1984))
• Route ATTC	Route via ATTC
• RCCPaging	Intra-State routing only
• TELECOMMCAN	Do not Route. (900 NXX Codes Only)

### 1.10 500 NXX Personal Communications Services (PCS) Code Assignments, Definitions

The following provides instructions on how to identify the assignments that are associated with non-geographic Personal Communications Services NXX codes (NPA 500) listed in LATA 999, which can be found in Volume 8, Section 4.9 of the LERG Routing Guide and in LERG6 data files.

Questions regarding these assignments should be referred to the NANPA website, www.nanpa.com or:

NANPA 46000 Center Oak Plaza Sterling, VA 20166

The information provided under each column is described as follows:

COLUMN HEADING		DESCRIPTION
EFF DATE	-	This is the assignment date of the NXX. Activation is not implied and will be pursuant to local tariffs.
NPA	-	Identifies the code as a 500 Service Access Code (SAC).
COC	-	The assigned 500 NXX code.
COC TYPE	-	Not applicable but defaults to EOC (End Office Code).
SSC	-	Not applicable but defaults to N (no special services).
DIND	-	Not applicable but will default to "Y".
TR DIG	-	These fields are the number (quantity) of terminating digits to be outpulsed to a Local Exchange Carrier by an Interexchange Carrier. Default is End Office: 7, Access Tandem 10.
TRF STAT	-	Not applicable.
OCN	-	The column heading labeled "OCN" (Operating Company Number) is primarily used to identify a Local Exchange Carrier (LEC) or another carrier or company. An entry in this column consisting of four numerals (i.e., 9214, 0124, etc.) would designate a Local Exchange Carrier. Other Carriers are identified in this column by a four character alpha entry with the letter "I" followed by the three letter Access Customer Name Abbreviation (ACNA) or the OCN of PXXX to identify a company that does not have a LEC OCN or ACNA.

#### NOTICE

SECTION 1 PAGE 73 SEPTEMBER 1, 2003

COLUMN HEADING

DESCRIPTION

LOCALITY

Not applicable. Default is SACSERVICE.

**CNTY** 

Not applicable.

ST

Not applicable. Default is PC.

RATE CENTER

Not applicable. Default is SACSERVICE.

LINES FROM TO

Not applicable. Default is 0000-9999.

**SWITCH** 

This column provides information about the 500 NXX code, such as the Carrier Identification Code (CIC), or the assignment to a LEC or other company. The following table provides explanations for the entries in this column:

EXAMPLE OF SWITCH FIELD	EXPLANATIONS OF THE FIELD		
ASGNPCS0222	ASGN PCS	=	Assignable Personal Communications Services
	0222	=	CIC
ASGNPCSOCNX	ASGN	=	Assignable
	PCS	=	Personal Communications Services
	OCNX	=	Refer to OCN Contact list

Cellular Companies who want a PCS NXX must have a CIC because LECs must send a 0ZZ and CIC to identify the Cellular Company.

This information will identify the specific assignments that are associated with a 500 NXX Code.

The 500 NXX Codes assignment status and their definitions are:

Status	Definition
• Assignable	New assignments of the last 4 digits are possible.
• PCS	Personal Communications Services

#### NOTICE

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

#### 1.11 710 NXX Code Assignments, Routing Procedures, Definitions

SC 710 is a non-geographic, toll free Numbering Plan Area (NPA) code that has been assigned by the North American Numbering Plan Administration (NANPA) to the United States Government. The NXX codes within SC 710 are administered by the U.S. Government instead of by the NANPA Code Administrators. Questions concerning the assignment of 710-NXX codes should be addressed to

The Office of the Manager National Communications System (OMNCS)

GETS Technical Director
Telephone: 703-607-4800

This section describes how routing data for SC 710 NXXs are provided in the LERG Routing Guide and other Telcordia Routing Administration data products that contain these fields. The NXXs will be in LATA 999.

When assigned by the OMNCS, the 710 NXXs will appear in Volume 8, Section 4.9 of the paper LERG Routing Guide and in LERG6 (Destination Code Data) of data file versions of the LERG Routing Guide. Each data field in LERG6 is described below in cases where the value or interpretation for SC 710 is different than for geographic NPA-NXXs:

FIELD NAME	VALUE OR INTERPRETATION
LATA	999
LATA Name	RESERVED FOR SVCS
Status	No difference
Effective Date	No difference
NPA	710
NXX (COC)	Specific NXXs that are assigned by OMNCS
BLOCK	A
COC Type	Default value of "EOC" is used
SSC	Default value of "N" is used
OCN	4758 is the OCN assigned to the U.S. Government
AOCN	0341 (Sprint Local Tel. Div.)
LOC NAME	710SERVICE
LOC TYPE	Blank
LOC STATE	TS (i.e correleates to value in 5-6 <sup>th</sup> position of SWITCH)
RATE CENTER	710SERVICE (i.e., not applicable)
SWITCH	RTGETSAGENT (see explanation following table)
DIND	Y
TRDIG EO	10
TRDIG AT	10
PORTABLE	N
SHA IND	00
TEST LINE #	Blank
LINE RANGE	0000-9999
POOLING INDICATOR	N

#### NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

TELCORDIA TECHNOLOGIES

# TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 75 SEPTEMBER 1, 2003

SWITCH value of "RTGETSAGENT":

In some cases, the U.S. Government has special arrangements with local carriers to handle calls to SC 710 NXXs. In other cases, where the local carrier, cellular/PCS carrier, PBX operator, payphone operator or any other call originator does not have a special arrangement with the U.S. Government, the call originator should "Route To the Government Emergency Telecommunications Service (GETS) AGENT" (RTGETSAGENT). The agents to which calls should be routed in these cases currently are AT&T, Sprint, or MCI WorldCom. Payphone operators can receive compensation under the same provisions as for toll free calling using SAC 800, 888, 877, 866, 855, or other toll-free SACs.

#### 1.12 Country Codes

For the paper LERG Routing Guide see Section 3.5, for the LERG Routing Guide CD ROM see LERG2.DAT.

The "Notes" associated with the assignment of Country Codes are listed below and are provided for your reference.

The assigned codes were previously listed in, and taken from the Consultative Committee for International Telephone and Telegraph (CCITT) Recommendation E.164 - "Numbering Plan For The ISDN Era." Recently, the ITU, previously the CCITT, has decided to publish the Country Code assignments via the periodic issuance of an ITU Bulletin, a more timely and frequent method of code publication. The code assignments appearing in the LERG Routing Guide are derived from the most recent ITU Bulletin as well as any additional ITU Bulletins issued to announce specific Country Code assignment changes.

As a result of Issue #276 at the Industry Carriers Compatibility Forum, new procedures are being formulated for notification of Country Code assignments and service activation. Until these procedures are completed and agreed to in an industry forum, interim procedures are in effect to recognize that the International Telecommunication Union (ITU) - Telecommunications Standards Board (TSB) assigns codes and that international carriers cooperate to activate codes. Notifications during the interim period will refer to (1) assignments and (2) testing and activation dates.

The material used in this LERG Routing Guide is reproduced with the prior authorization of the ITU as the copyright holder; its presentation in the LERG Routing Guide is the sole responsibility of Telcordia Technologies and does not engage the responsibility of the ITU.

The assignments are being provided so that exchange companies will have a list of all countries that might be dialed by their customers.

Questions about ordering English-language publications of the ITU/CCITT should be directed to:

Phillips Business Information 1201 Seven Locks Road Potomac, MD 20845 TEL: 1-800-777-5006 FAX: 301-309-3847

Questions about the contents of any ITU publications should be directed to:

International Telecommunications Union General Secretariat - Sales Section Place des Nations CH1211 Geneva 20 SWITZERLAND TEL: 41 22 730 51 11

FAX: 41 22 733 72 56

NOTICE
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

# TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 77 SEPTEMBER 1, 2003

#### **NOTES**

The following footnotes correspond to the associated records listed in the Country Code Section of the paper LERG Routing Guide (Section 3.5) and the LERG2 data files. Any additions or corrections are based on the 6/1/00 publication of the ITU-T Telecommunication Standardization Section of ITU "List of ITU-T Recommendation E.164 Assigned Country Codes (Position on 1 June 2000)".

- a) Integrated numbering area.
- b) Code shared between Mayotte Island and Comoros (Islamic Federal Republic of the ).
- c) Will be allocated, only after all three digit codes from groups of ten are exhausted.
- d) The resource +878 878 has been reserved for Universal Personal Telecommunications UPT field trials via IP-based technology. The format of the numbering resource is +878 878 00000 XXXX. The block of numbers XXXX will be administered by TSB.
- e) Reserved for future use.
- f) Including Australian Antarctic Territory, and Norfolk Island.
- g) U.A.E..: Abu Dhabi, Ajman, Dubai, Fujeirah, Ras Al Khaimah, Sharjah, Umm Al Qiwain.
- h) Including Christmas Island and Cocos-Keeling Islands.
- i) Associated with shared country code 882, the following two-digit identification code reservations or assignments have been made for the international networks of:

APPLICANT	NETWORK	COUNTRY CODE AND IDENTIFICATION CODE	STATUS	DATE
British Telecommunications plc	Global Office Application	+882 10	Assigned	12/1/98
Singapore Telecommunications Pte Ltd (ST)	Asia Pacific Mobile Telecommunications (APMT)	+882 11	Reserved	
MCI/WorldCom	HyperStream International (HIS) Data Network	+882 12	Assigned	5/10/99
Telespazio S.p.A.	EMS Regional Mobile Satellite Systems	+882 13	Assigned	6/11/98
GTE	GTE International Networks	+882 14	Reserved	

#### NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

# TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

APPLICANT	NETWORK	COUNTRY CODE AND IDENTIFICATION CODE	STATUS	DATE
Telstra	ITERA Digital Network	+882 15	Reserved	
United Arab Emirates Administration	Thuraya RMSS Network	+882 16	Assigned	6/1/00
AT&T	AT&T International ATM Network	+882 17	Reserved	
Teledesic	Teledesic Global Network	+882 18	Reserved	
Telecom Italia	Telecom Italia Global Network	+882 19	Reserved	
Asia Cellular Satellite (ACeS)	Garuda Mobile Telecommunication Satellite System	+882 20	Reserved	
Ameritech	Ameritech's Gateway Global Service, Inc. (AGGSI) network	+882 21	Reserved	
Cable & Wireless plc	Cable & Wireless Global Network	+882 22	Assigned	12/01/98
Sita-Equant Joint Venture	Sita-Equant Network	+882 23	Reserved	
Telia AB	Telia multinational ATM Network	_882 24	Reserved	
Constellation Communications, Inc.	Constellation System	+882 25	Reserved	
SBC Communications Inc.	Global Data Network	+882 26	Reserved	

j) Associated with shared country code 881, the following one-digit identification code have been made for the GMSS networks:

NETWORK	COUNTRY CODE AND IDENTIFICATION CODE	STATUS
ICO Global Communications	+811 0 and +811 1	6/1/00
Ellipso	+881 2 and +881 3	Reserved
Iridium	+881 6 and +881 7	11/1/97
Globalstar	+881 8 and 881 9	2/24/99

k) Reserved for the Palestinian Authority.

#### NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

<sup>\*</sup>Telcordia™ and Telcordia™ LERG™ Routing Guide are trademarks of Telcordia Technologies, Inc.

#### TELCORDIA TECHNOLOGIES

# TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

SECTION 1 PAGE 79 SEPTEMBER 1, 2003

- Reserved for E.164 country code expansion.
- m) Associated with shared country code 388 for Group of countries, the following one-digit identification code has been assigned to the network ETNS (European Telephone Numbering Space) 388 3.
- n) Within People's Republic of China Country Code 86, Country Code 866 has been assigned to Taiwan. This is documented in Notification No. 1157 of the International Telecommunications Union (ITU) and is the only code that is internationally recognized by all members of the ITU.

The code 886 is the code self-attributed by Taiwan and is not in any way internationally recognized by the ITU. The use by Taiwan of the self-attributed code 886 has, up to now, not caused problems with regard to communications of other Members of the ITU since there have been sufficient codes available to satisfy incoming requests without the ITU having to attribute code 886.

SECTION 1 PAGE 80 SEPTEMBER 1, 2003

# TELCORDIA™ LERG™ ROUTING GUIDE GENERAL INFORMATION

TELCORDIA TECHNOLOGIES

#### 1.13 976-LIKE Codes

976-LIKE codes are NXXs that function as NXX 976 codes. 976 has been used essentially as an NXX for pay services provided by various service providers (e.g. lottery numbers, time, weather, etc.). Use may vary by NPA. In response to consumer issues, regulatory decisions, etc. (all of which may vary by state and company) non-976 NXXs have been established in some jurisdictions to function as 976. These 976-LIKE NXXs may be used to isolate certain types of services from those provided via 976. These NXXs are routed to the service providers' processes (not necessarily a specific switch) and are usually intraLATA in nature. Such codes may be found in the LERG Routing Guide as a type of "Oddball" code and should carry the COCTYPE value of INP (Information Provider).

## 1.14 Telcordia<sup>TM</sup> Routing Administration Product Ordering Information

The LERG Routing Guide is produced quarterly in book format (Volumes 1 through 9). The LERG Routing Guide is also available monthly as data versions a CD ROM or transmitted (without the Microsoft Access database version) via NDM (Network Data Mover); each of these data versions contains the data in ALL nine volumes of the paper LERG. If you are interested in ordering the LERG (paper is no longer offered to new subscribers), further information, and an order form can be obtained at <a href="https://www.trainfo.com">www.trainfo.com</a>. Alternatively, you may call the Telcordia Routing Administration Customer Service Center on 866-NPA-NXXS (i.e. 866-672-6997) or (732) 699-6700 to obtain further information.

The LERG Routing Guide is a licensed data product and is provided under a specific enterprise license agreement that defines how it can be used in a given company. Additional information on licensing of the LERG Routing Guide can be found at <a href="https://www.trainfo.com">www.trainfo.com</a>, or by calling the Telcordia Routing Administration Customer Service Center.

## 1.15 Business Integrated Routing and Rating Database System (BIRRDS)

BIRRDS is the underlying database to the LERG<sup>TM</sup> Routing Guide data and other products issued by TRA. It is maintained by TRA and is a real time database that is accessible during general business hours and may be available on weekends and holidays.

#### **Online Access Information:**

On-line access to BIRRDS permits instant access to all the data contained in the database. However, the database is not the "LERGTM Routing Guide" per se. Data fieldnames, records, etc. in the database may have some variations in nomenclature, may not be data intended for the LERG, etc. Likewise, the LERG may have some data elements that are "processed" from the database and thus may not directly appear in the database.

AOCN companies have personnel with user IDs that can perform both database updates and inquiries. These AOCNs have the responsibility for keeping their data up-to-date. All other individuals interested in having access to BIRRDS have user IDs that can do inquiries only. There is an inquiry-only charge is based on the number of minutes of connect time. If you are interested in obtaining on-line access, please call the Telcordia™ Routing Administration Customer Service Center on 866-NPA-NXXS (i.e. 866-672-6997) or (732) 699-6700 for more information.

NOTICE

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION,
IS TO BE USED ONLY PURSUANT TO CONTRACT AND CANNOT BE RELEASED
WITHOUT WRITTEN PERMISSION OF TELCORDIA TECHNOLOGIES, INC.
Copyright © 1984-2003 Telcordia Technologies

# **LERG 6 - Results**

# **Destination Codes By NPA/NXX**

Click Here To Export 33 Results

LATA STATUS EFF DATE	NPA	NXX	PORT	POOL	AOCN	OCN	STATE	LOC_NAME
<u>466</u>	<u>606</u>	236	N	N	G082	<u>7514</u>	KY	MAYSVILLE
<u>466</u>	<u>606</u>	238	N	N	G082	<u>7514</u>	KY	BENHAMLNCH
466	<u>606</u>	317	N	N	G082	<u>7514</u>	KY	JACKSON
466	<u>606</u>	318	N	N	G082	<u>7514</u>	KY	STANTON
<u>466</u>	<u>606</u>	319	N	N	G082	<u>7514</u>	KY	BEATTYVL
<u>466</u>	<u>606</u>	320	N	N	G082	<u>7514</u>	KY	STANFORD
466	<u>606</u>	414	N	N	G082	<u>7514</u>	KY	HAZARD
466	<u>606</u>	418	N	N	G082	<u>7514</u>	KY	IRVINE
<u>466</u>	<u>606</u>	444	N	N	G082	<u>7514</u>	KY	PIKEVILLE
<u>466</u>	<u>606</u>	457	N	N	G082	<u>7514</u>	KY	INEZ
<u>466</u>	<u>606</u>	458	N	N	G082	<u>7514</u>	KY	LOUISA
<u>466</u>	<u>606</u>	459	N	N	G082	<u>7514</u>	KY	PRESTONSBG
466	<u>606</u>	463	N	N	G082	<u>7514</u>	KY	PAINTSVL
<u>466</u>	<u>606</u>	468	N	N	G082	<u>7514</u>	KY	SOWILLIMSN
466	<u>606</u>	469	N	N	G082	<u>7514</u>	KY	WHITESBURG
<u>466</u>	<u>606</u>	504	N	N	G082	<u>7514</u>	KY	FREEBURN
466	<u>606</u>	507	N	N	G082	<u>7514</u>	KY	CORBIN
<u>466</u>	<u>606</u>	509	N	N	G082	<u>7514</u>	KY	PIKEVILLE
<u>466</u>	<u>606</u>	562	N	N	G082	<u>7514</u>	KY	HARLAN
<u>466</u>	<u>606</u>	576	N	N	G082	<u>7514</u>	KY	MIDDLESBO
<u>466</u>	<u>606</u>	577	N	N	G082	<u>7514</u>	KY	PINEVILLE
<u>466</u>	<u>859</u>	315	N	N	G082	<u>7514</u>	KY	MTSTERLING
<u>466</u>	<u>859</u>	343	N	N	G082	<u>7514</u>	KY	DANVILLE
466	<u>859</u>	345	N	N	G082	<u>7514</u>	KY	SPRINGFLD
466	<u>859</u>	348	N	N	G082	<u>7514</u>	KY	SALVISA
466	<u>859</u>	378	N	N	G082	<u>7514</u>	KY	HARRODSBG
466	<u>859</u>	416	N	N	G082	<u>7514</u>	KY	LEXINGTON
466	<u>859</u>	417	N	N	G082	<u>7514</u>	KY	BEREA
<u>466</u>	<u>859</u>	419	N	N	G082	<u>7514</u>	KY	PARIS

<u>466</u>	<u>859</u>	505	N	N	G082	<u>7514</u> KY	RICHMOND
466	<u>859</u>	506	N	N	G082	<u>7514</u> KY	WINCHESTER
<u>466</u>	<u>859</u>	508	N	N	G082	<u>7514</u> KY	CYNTHIANA
<u>466</u>	<u>859</u>	996	N	N	G082	7514 KY	CARLISLE

# **LERG 7 SHA - Details**

# **Switch Homing Arrangements**

SWITCH : LXTNKY24W	26 STATUS:	PATE:
SHA INDICATOR :		LATA WINCHESTER KENTUCKY
OCN : 7514	AOCN: G082	
Originating	Terminating	Additional
FG B TDM : WNCHKYMA02T	FG B TDM : WNCHKYMA02	HOST:
FG C TDM:	FG C TDM:	STP 1:
FG D TDM: WNCHKYMA02T	FG D TDM: WNCHKYMA02	STP 2:
OS TDM :	OS TDM:	800 SSP :
FG B INT:	FG B INT:	ISDN FS OFC :
FG C INT:	FG C INT:	ACTUAL SW ID:
FG D INT:	FG D INT:	and.
LOCAL TDM:	LOCAL TDM:	
INTRA TDM:	INTRA TDM:	
CS DATA TDM:	CS DATA TDM :	
CALL AGENT :	TRUNK GATEWAY :	

# **LERG 7 SHA - Details**

# **Switch Homing Arrangements**

SWITCH : LXTNKY24W	Z26 STATUS:	EFF CATE:
SHA INDICATOR :		LATA AME: WINCHESTER KENTUCKY
OCN : 7514	AOCN: G082	
Originating	Terminating	Additional
FG B TDM:	FG B TDM:	HOST:
FG C TDM:	FG C TDM:	STP 1:
FG D TDM: DAVLKYMA01T	FG D TDM: DAVLKYMA01T	STP 2:
OS TDM:	OS TDM:	800 SSP :
FG B INT :	FG B INT :	ISDN FS OFC :
FG C INT:	FG C INT :	ACTUAL SW ID:
FG D INT:	FG D INT:	
LOCAL TDM:	LOCAL TDM:	
INTRA TDM:	INTRA TDM :	
CS DATA TDM:	CS DATA TDM :	
CALL AGENT :	TRUNK GATEWAY :	

# **LERG 7 SHA - Details**

# **Switch Homing Arrangements**

SWITCH: LXTNKY24W	/26 STATUS :	DATE:
SHA 103 INDICATOR :	LATA : 466	LATA WINCHESTER KENTUCKY
OCN : 7514	AOCN: G082	
Originating	Terminating	Additional
FG B TDM: LXTNKYXA01T	FG B TDM: LXTNKYXA01	HOST:
FG C TDM:	FG C TDM:	STP 1:
FG D TDM: LXTNKYXA01T	FG D TDM: LXTNKYXA01	STP 2:
OS TDM:	OS TDM:	800 SSP :
FG B INT :	FG B INT:	ISDN FS OFC:
FG C INT:	FG C INT :	ACTUAL SW ID :
FG D INT:	FG D INT:	Acceptance of the second of th
LOCAL TDM:	LOCAL TDM:	7900. AUS . of
INTRA TDM:	INTRA TDM:	Semination of
CS DATA TDM:	CS DATA TDM :	
CALL AGENT :	TRUNK GATEWAY :	· Markana de la companya de la comp

Jan-21-03 12:04P SouthEast Telephone - Swi

SouthEast Telephone

Laungton Switch Room 301 East Main Street Suite #620 Lexington, Kentucky 40607 Phone: (606)444-3000 Fex: (505)444-3100 URL: http://www.se-tel.com Email: wes.maynard@setel.com

354707

Post-it* Fax Note 7671	Data 8/28   * of
TO LYNN	From (1)ANDA
Co./Dept.	Co.
Phone if	Phone # 704 845 7287
Fax * 501 905 8813	Fax #

### **ASR To: Alltel ICSC Group** Pon#WM01212003

Screen ICASR	BDS-TELIS DATA	LENTRY SUF			
Command	Access Se	vice Request	Ar	chive N	
CCNA SEQ PO	ON WM01212003	VER_ICS	C AT57 D	/TSENT_01202	003
D/T Proc	D/T Upd			atus F (CC //	
D/T Sel	D/T Ret		SPA_	CNO	
ASR	EC Status F		F	TOT	
DDD 02042003	Prjet LXTN120202	NOR	_LUP	_ReqTyp MD	Act N
RTR I-			<u> </u>		
SUP_AFO Y Y	Y Exp_AENG_ALI	B_AGAUT_:	Dated	ltper	M
	EAST TELEPHONE I	NCFBA		/	_ \
FNI		CFNI			PTU 20
	L0024/LXTNKYXA01	T/LXTNKY24	IDSI_		PLU 10
ECCKT NEW					0000024
		C_TEL		IC-ID	
TSC NEW		TNKY24XXX			A_AL_
ROrd	SPEC	PPTD		PFPTD	
RPON	CCVNAS	C-ECT			
SAN		AFG_	TQ DY	BSA_	
_					
	-Home Job for LXTNE				_
	v High Cap and Trual	3. This group	should be	a Two Way gr	oup for
Toll Traffic.					
			- 1 0 i	2011	
		1/14	18	304(0	Į

DFH-TD/LXTNKYXAOIT/77/LXTNKY24XXX
203/TIZF/LXTNKY24W26

# SouthEast Telephone

Lexington Switch Rooms 301 East Main Street Suite #820 Lexington, Kentucky 40507 Priorit: (605)444-3000 Fatt: (606)444-3100 URL: http://www.se-tel.com Email: wee.maynerd@setal.com

### ASR To: Alltel ICSC Group Pon#WM01212003

Screen ICAUMBUS-I'ILIS DA ASR Admi	TA ENTRY SUBSYSTEM 01212003  nistration Information
CCNA SEQ PON WMUIZIZUUS	VER ICSC ATS7 Reglyp MID ACIN
ECCKT NEW	Status F
SR EC Status F RPON	
Billi	og Information
BIUNM SOUTHEAST TELEPHON	E INC. SBIINm
ACNA SEQ TEN EBP Y	
Street PO BOX 1001	_ FI Rm VCVTA
City PIKEVILLE	State KY Zip 41501-
BillCon: Nanette Stages	Tel 606-432-3000SCL A VTA
	act Information
Init WES MAYNARD	Tel 859-253-1084
Street 301 EAST MAIN STREET	FI 6TH Rm 620
City LEXINGTON	State KY Zip 40507-
Chy DEANIGION	State Kt Zip 4030/-
DagCon WES MAYNARD	RDTel 859-253-1084
Street 30 EAST MAIN STREET	DRC FDRC F1 6TH Rm 620
City LEXINGTON	State KY Zip 40507-
ImpCon WES MAYNARD	Tel 859-253-1084

# SouthEast Telephone

Lesington switch reddings of East Main Street Suite #620 Lesington, Kentucky 40507 Phone: (806)444-3000 Fax: (906)444-3100 URL; http://www.se-tsl.com Email: wes.maynard@setel.com

# ASR To Alltel ICSC Group Pon#WM01212003

	Screen ICFGB BDS-TELIS DATA ENTRY SUBSYSTEM 01212003 ASR Feature Groups B,C,D
	CCNA SEQ PON WM01212003 VER TCSC ATS7 ReqTyp MD ACT N Status F
	ASR EC Status RPON
	Service Details
(Total	NC SD-D NCI 04DS6.44 TI.V DFDLRD DDLRD 01272003 DFOC 01282003 QACI TTT 3 TrfTyp OT-TT
Carlotte Comment	SecTLV EML CIC 5738 TRN RECCKT
	RECCKT 03
	CFA New/T1ZF/LXTNKYXA01T/LXTNKY24DS1 CPT CFAU > AcSwLoc LXTNKY24XXX Acsw Type Excel LNX 2000
cial ten	CKRI 101F/T1ZF/LXTNKYXA01T/LXTNKY24DS1 HBAN NEW
20 tien	FACTL SCSPC 003-034-024 TCIC 001-024 NS LT
\u0	SLC NG+ HC-M IMPTEL 859-253-1084 MUXLOC LXTNKY24H36 Insplicted 859-253-1084
1	Impreter 859-253-1084
Point	Remarks: Re-Home Job for I.XTNKYXA01T
1 Coac	Establish a new High Cap and Trunks. This group should be a Two Way group for Toll Traffic.
	Tou Traine.
	0311136018
	234 136 018
1	l
{	

:

## SouthEast Telephone

Leangton Switch Rooff 301 East Main Street Suite #620 Leangton, Kentucky 40507 Phone: (608)444-3000 Fac (606)444-3100 URL: http://www.se-tel.com Email: was.maynard@salal.com

# ASR To: Alltel ICSC Group Pon#WM01212003

Screen ICFB2	BDS-TELIS ASR	Feature Gro	ups B.C.D	)	**************************************
CCNA SEQ PON	WM01212003	VER	_ ICSC A	T57 ReqTy	p MD ACT N
RCCKT NEW			Status P		
	Status F RP	ON	- NC	SD-D	
RECCKT					
RECCKT					
		Service De	tails		
SSPC	- PCU	TYPE	SSPC		PCU
TYPE_					
SSPC	- PCU	TYPE	SSPC		PCU
TYPE			_ ~~~ ~		
SSPC	- PCU	TYPE	SSPC	<b>-</b>	PCU
TYPE_					
SSPC	PCU	TYPE	SSPC	<b>.</b> - •	PCU
TYPE					
PRI ADM		SEC AD	M		
		Service Op	tions		
SR C MBA A OP	S <u>a</u> geto <u>d</u> w	AC N CDN	PDIDQ	Y PC ACT	_ REL TSC
ALTRO	FG!	<b>D95</b> 0			
SCRT					CHOK
CGAP					
		Location Se	ection		
SecLOC LXTNK	YXA01T			DNPA/NX	X 859253
Remarks: Re-Ho Establish a new H Toll Traffic.				uld be a Two	Way group for
Establish a new H	ome Job for LX	TNKYXA0	ıT		

Jan-21-03 12:05P SouthEast le lephone -

SouthEast Telephone

Lesington Switch Room
301 East Main Street Suite #620
Lesington, Kentucky 40507
Phone: (605)444-3000
Fax: (606)444-3100
URL: http://www.sa-tal.com
Email: was\_msynard@astel.com

# ASR To: : Alltel ICSC Group Pon#WM01212003

Screen ICTQ	BDS-TELIS			3SYSTE	M 0	1212003
		tion Quest	ionnaire	4 DOME TO		n A-4 N
CCNA SEQ PON W	M01212003	VER		A157 H	keqTyp M	D WELL
ECCKT NEW			Status F		***	
ASR_		EC Sta	tus <u>F</u>		RPON	
	Adm	inistrative :	Section			
Tech-Con WES MA	YNARDBCR5	Tel 859-2: B	53-1084 CR6	DB Te	st TN 859- 64 <u> </u>	416-99 <del>99</del> ARE _
	C	ommon Sec	tion:			
RefTG TG TSC				Test Tk	SAC OT	OVLP
A at TVP			ACC Se	n ANI Si	y Non	
A N B		_2W_ Y	Y HL	Y TA	YY	Y
B						
					_	
0					_	
Ref CTO OSAC US	DO CSP CPN	CIP FACT	AltRef F	ACT XX	XX FAC	T XXXX
A						
В		•				
C						
D						
Remarks: Re-Hon Establish a new Hig Toll Traffic.	ne Job for LXT h Cap and Tru	NKYXA01 inks. This g	T roup sho	uld be a	Two Way	group for
			***************************************			

SouthEast Telephone

Catangton Switch Rosm
301 East Main Street Suite #620
Lexington, Kentucky 40507
Phone: (806)444-3000
Fax: (606)444-3100
URL: http://www.se-lei.com
Email: was.maynant@setel.com

## ASR To: : Ailtel ICSC Group Pon#WM01212003

Scree	n ICTQ2				'A ENTRY onnaire (C			Л	01212003
CCN/ ECCI	A SEQ PO KT NEW	N WMOI	212003		ER_IC	SC AT	37 Req	Тур М	D Act N
ASR			Com		tatus F	R	PON		
Ref	BRAND	ANNC			·	•	C	CW	
A	-		-		· · · · · · · · · · · · · · · · · · ·				
B	-								
D									
v	-		**************************************		<del></del>				
C.NF	A/NXX C	.NPA/NX	X C.Nf	'A/NXX	C.NPA/NX	KX C.N	PA/NXX	C.NP	A/NXX
C.NP	A/NXX C	NPA/NX	X C.NF	'A/NXX	C.NPA/NX	XX C.N	PA/NXX	C.NP	A/NXX
									-
C.NP	A/NXX C	:NPA/NX	X C.NI	XXVA	C.NPA/N	KX C.N.	PA/NXX	C.NP	A/NXX
				<del> </del>					
CCNA	en ICTQ	N WM01	Tra 202003	inslation VER	Questionn ICSC	aire AT57 I	RegTvo 1		<u>01202003</u>
CCNA	SEQ PO	N WM01	Tra 202003 tus F	malation VER ASR	Questionn	aire AT57 I F R	RegTvo 1		
CCNA ECCI ACIC	SEQ PO KT NEW	N WM01 Stat	Tra 202003 tus F / Fe: 4)	unslation VER ASR ature Gr	QuestionnICSC EC Status oup D Seco	AT57 I F R tion 7)	ReqTyp] PON	MD A	et <u>N</u>
CCNA ECCI ACIC CIC 5	A SEQ PO KT NEW	N WM01 Stat	Tra 202003 tus F / Fea 4) atra _ 1	unslation VER ASR ature Gr  5) inter_ (	Questions ICSC EC Status oup D Sec 6) Coin-EA N	AT57 I F R tion 7)	ReqTyp] PON	MD A	et <u>N</u>
CCNA ECCI ACIC CIC S ROU	A SEQ PO KT NEW 1)2 1738 CCI TING MA	N WM01 Stat  ) 3) ass In TRIX:	Tra 202003 tus F / Fea 4)	wilation VER ASR ature Gro inter_ ( Service P	Questions ICSC ICSC EC Status oup D Sec 6) Coin-EA N refixes	AT57 I F R tion 7)	ReqTyp] PON	MD A	et <u>N</u>
CCNA ECCI ACIC CIC 5 ROU ANI I	A SEQ PO KT NEW 11)2 1738 CCI TING MA	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+	Tra 202003 tus F  Fer 4) tra 1+ 0-	unstation VER ASR ature Gr 5) Inter 6 Service P	QuestionnICSCEC Status oup D Sec6)	naire AT57 J F R tion 7)	ReqTyp PON	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC 5 ROUT ANI I Digits	A SEQ PO KT NEW 11)2 1738 CCI TING MA	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4)  atra 1 4 0-1 500 50	Milation VER ASR ature Gro inter (Service P 1+ (10 700 70	Questions ICSC ICSC EC Status oup D Sec 6) Coin-EA N refixes	naire AT57 J F R tion 7)	ReqTyp PON	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC S ROU ANI I Digits All	SEQ PO T NEW  11)2  1738 CCI  TING MA  I All 1+ 0+	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4) itra 1 500 50	wilation VER ASR ature Gri  inter Service P 1+ 0 700 70	QuestionnICSCEC Status oup D Sec6)	naire AT57 J F R tion 7)	ReqTyp PON	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC 5 ROU'I ANI I Digits All	SEQ PO T NEW  11)2  1738 CCI  TING MA  I All 1+ 0+ A	N WM01 Stat ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4) itra 1 1 500 50	wilation VER ASR ature Gri  inter Service P 1+ (10,000,700,700,700,700,700,700,700,700,7	Questionn ICSC EC Status oup D Sector 6) Coin-EA N refixes	naire AT57 J F R tion 7)	ReqTyp PON 8)	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC S ROU ANI I Digits AII 00	A SEQ PO KT NEW  21) 2  738 CCI FING MA  1 All 1+ 0+ A	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4)  tra 4)  tra 1 64  1 500 50	mslation VER ASR ature Gro Service P 1+ (	QuestionsICSC	naire AT57 J F R tion 7)	ReqTyp PON 8)	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC 5 ROU ANI I Digits All 00 01	A SEQ PO KT NEW  1) 2  738 CCI FING MA  I All 1+ 0+ A	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4) itra 1 500 50	wilation VER ASR ature Gro inter 6 Service P 1+ ( 0 700 70	QuestionsICSC	naire AT57 J F R tion 7)	ReqTyp PON 8)	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC S ROUT ANI I Digits AII 00 01	A SEQ PO KT NEW  1) 2  738 CCI FING MA  I All 1+ 0+ A	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4) itra 1 500 50	wilation VER ASR ature Gro inter 6 Service P 1+ ( 0 700 70	QuestionsICSC	naire AT57 J F R tion 7)	ReqTyp PON 8)	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC 5 ROU ANI I Digits All 00 01	A SEQ PO KT NEW  1) 2  738 CCI FING MA  I All 1+ 0+ A	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4) itra 1 500 50	wilation VER ASR ature Gro inter 6 Service P 1+ ( 0 700 70	QuestionsICSC	naire AT57 J F R tion7)	ReqTyp PON 8)	<u>MD</u> A	ct <u>N</u>
CCNA ECCL ACIC CIC 5 ROUT ANI I Digits AII 00 01 06 07 20	A SEQ PO KT NEW  1) 2  738 CCI FING MA  I All 1+ 0+ A	N WM01 Stat  ) 3) ass In TRIX: 1+ 0+ 00 011 01	Tra 202003 tus F 4) itra 1 500 50	wilation VER ASR ature Gro inter 6 Service P 1+ ( 0 700 70	QuestionsICSC	naire AT57 J F R tion7)	ReqTyp PON 8)	<u>MD</u> A	ct <u>N</u>

# SouthEast Telephone

Emurgion Switch Resm 301 East Main Street Suite #620 Lexington, Kentucky 40507 Phone: (606)444-3000 Fax: (606)444-3100 URL: http://www.we-tel.com Email: wes.meynard@setel.com

ASR To: Alitel ICSC Group
Pon#WM01212003

					Y Cast.	*****	12000		
Scr	en l	CEC	DD	BDS-	**			BSYSTEM	01212003
					Enc	l Office D	<b>letail</b>		
			PON WI						yp MD Act N
EC(	CKT	NEV	V Statu	SF A	SR	AP S	tatus <u>F</u>	RPON	
			-						
EU	D Usi							01T Units CO	.8
Ori	g Trl		Ter	m Trf	•	TrfTyp C	T-TT TS	CNEW	_
	EO	Act	End Of	lice (	Orig	Term	TSC	ANI	
	1	Δ	AL	<u>L</u>	_20%_	_80%_		_ <u>Y</u>	
	2	_							
	3	_							
	4	_							
	5	-							
	6	-							
	7	-		<del></del>					
	8	-		-				<b>-</b>	
	9	_						-	
	10	-							

Remarks: Re-Home Job for LXTNKYXA01T

Establish a new High Cap and Trunks. This group should be a Two Way group for Toll Traffic.

Jan-21-03 12:05P SouthEast Telephone - Jwi

SouthEast Telephone

Castigion Switch Reom
301 Seet Main Street Suite #820
Lexington, Kentucky 40507
Phone: (805)444-3000
Fac: (605)444-3100
URL: http://www.se-bal.com
Ernett: wee.maynerd@setel.com

# ASR To Alitel CLEC Local Interconnection Group Pon#WM01212003

Screen ICACI BDS-TELIS DATA ENTRY	
Additional Circuit I	
CCNA SEQ PON WM01212003 VER ICSC A	T57 ReqTyp MD Act N
ECCKT NEW Status F ASR EC State	tus F RPON
Circuit Detail	
CKR L0001-L0024	RefNum 0001
CKTACT _ CFA New/TIZF//LXTNKYXA01T/LX	TNKY24W26
CPTCFAU	
CKRI	HBAN
CCEA	TC1C 001-024
RENJKCodePCAJKNum	JKPos JS NHNL NHN
RORDS25EXR_	
ECCKT 1-24 AFTGJZL-LXTNKYXA01T-LXT	NKY24XXX TRN
RECCKT	
WACDI	
WACD2	<del></del>
Primary Location	
JKCode PCA JS SMJK	
ASG_CRO	
Remarks: Re-Home Job for LXTNKYXA01T	
Establish a new High Cap and Trunks. This group	should be a Two Way group for
Toll Traffic.	

7048413231

T-011 P.010/011 F-539

ALLIEL .

THISC

# ICSC Confirmation Printed on 1/28/03

V 25

SEO	PDN WM01212003A		YER	ASR NO 3 <u>54707</u>			SPA	RT F	HIT WES M	AYNARD	
ICSC ATS7 EMAIL	CD/T SENT 1/28/03 10:39:	37	AP REP WANDA	HUNTER			AP REP TEL 704.845-7287				
AP DSGCON TEL	AP	F DSGCON TEL	, •	AP OCO			APF OCD		AP MCG		PIA
APF MCD	PR	DVINT		PROJECT LXTN120202			CNO		APP 1/28/0	3 17:00:00	
DLAD 2/3/03 17:00:00	CD	LRD		PTD 2/7/03 17:00:00	 o	D[ 2/	10/03 17:00:00	EB		BAN	 L05738SE
LSO	SC N	FACTL LXTNKY24W	28	NC1 HC -M	NG SD	.D	NCI 04DS6.44 .		EC VER	SECLOC LXTNKYXAO	•
FDLRD 2/3 <u>(03</u> 00:00:00	FC1	ILAD	FP'	TD  03 00:00:00		FOD 2/10/0	3 00:00:00	TSP		CIWBAN	<del></del>
ECSPC 234138018	FR		EC	APC		RTI		·· · <del></del> -			

7048413231

T-011 P.011/011 F-539

CNA	PON	- I OUI-VET IST	• •	Printed on 1/28/03	148413231 I <b>UII</b>	T-011	P.011/011 F-53
0	WM01212003A		ASR NO	SPA RT			V 25
revit	Information		<u> </u>	F	NIT WES MAYNARD	_	
<b>L</b>	1-24/DF4-TD /LXTNKYX	101T/77/LXTNKY24	XXX				
ı	203 /T1ZF /LXTNKYXAO1T		·	REFNUM 0001	FACDES&		FACTYPE
				8K	FCHAN RTE MI		
a.	10001-L0024/LXTNKYXA01T	XTNKY24DS1			Misc Misc		
			SSWC		MISC		·
	0000100024		TSC	MT180048	MISC		
	N354707	••	TRKQTY DTN		Misc Misc		
	N354707		EOPDESG				
			relay rack Unit #	-			

# **CLEC Collocation Model for Kentucky ALLTEL**

# Virtual Collocation

- \* Switch would be located in a non-ALLTEL location (existing Excel switch location) with rack mounted DLC chassis in the ALLTEL central offices. Using
- \* Switch Equipment Cost are based on the standard pricing of the Taqua softswitch equipped with are end-office Class 5 softswitch including SS7, PRI and
  - \* DLC cost are based on a Calix C7 chassis with 456 lines.
- \* Leased transport would be required between the switch location and each central office.
  - \* Each central office will have the following equipment:
- (5) 100 pr DS0 cables
  - (2) 28 pr DS1 cables
    - (1) coaxial cable
- 40 Amp A & B Power Feeds
- (1) Rack of floor space w/ (1) Calix chassis equipped with 456 lines (23 cards total)

Exhibit 6 Example - Assumes SE Tolonkon
Switch Site NRC:
One-time Cost - Switch Equipment \$ 384,486 Taqua OCX softswitch
recurring Charges
Monthly Cost - Building \$ .  TOTAL Monthly Recurring Charges \$ .
Initial Cost per Collocation Site
One-time Cost - Collocation Facilities \$ 26,109
One-time Cost - DLC Equip (Capital Cost) \$ 38,600 Calix C7 Shelf DLC with 456 lines equipped.
Monthly Cost - Collocation Facilities \$ 1,659  Monthly Cost - Leased Facilities \$
Charges
TOTAL Non-recurring Charges: \$ 449,195 TOTAL Monthly Recurring Charges \$ 1,659

# **CLEC Collocation Model for Kentucky ALLTEL**

# Virtual Collocation

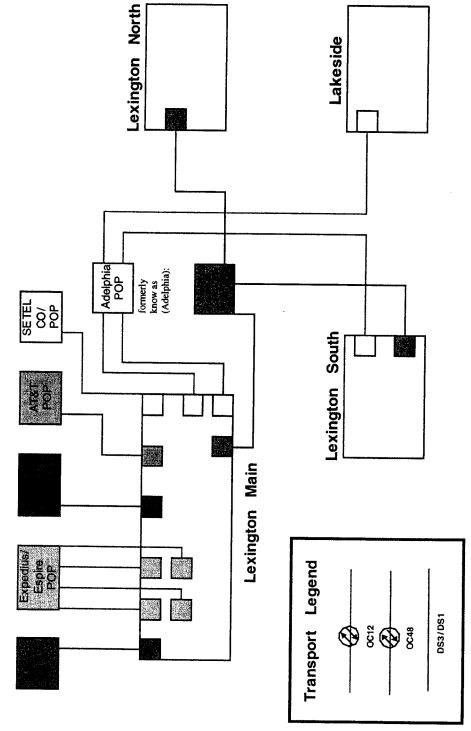
- \* Switch would be located in a non-ALLTEL location (existing Excel switch location) with rack mounted DLC chassis in the ALLTEL central offices. Using
  - \* DLC cost are based on a Carrier Access Adit 600 IADs (48 lines each)
    - \* Leased transport would be required between the switch location and each central office. \* Each central office will have the following equipment:
- (5) 100 pr DS0 cables
  - (2) 28 pr DS1 cables
    - (1) coaxial cable
- 40 Amp A & B Power Feeds
- (1) Rack of floor space w/ (10) Carrier Access Adit 600 IADswith 480 lines total

Switch Site And and place channel bank I switch and place channel bank I
One-time Cost - Switch Familiament
One-time Costs - Building
Court Courting Charges \$
Monthly Oct B. I.
TOTAL Monthly Becurring Charges \$
Initial Cost per Collocation Site
One-time Costs - Collocation Facilities \$ 26,100
anks (Ce \$
TOTAL Non-recurring Charges \$ 42,109
Monthly Cost - Collocation Facilities \$ 1.659
€9
TOTAL Recurring Charges \$ 1,659
TOTAL Non-recurring Charges: \$ 42,109
ge

!			Required		
One-time Costs - Collocation Facilities		<u>Cost</u>	Units	Т	otal Co
Engineering	\$	717.21	1	\$	
Building Modifications	\$	220.00	1	\$	
Virtual Floor Space (Per Linear Ft.)	\$	19.00	2	\$	
Access Card Administration (Per Card)	\$	21.00	5		105
BITS Timing	\$	307.00	1	\$	
Overhead superstructure, Per Project	\$2	2,497.00	i	•	2,497
Power (per 40 Amps )		2,905.00	2		5,810.
Facility Pull/engineering	\$	79.00	1	\$	79.
Facility Pull, Per Cable run	\$	225.00	8	-	1,800.
Facility Cable, per Cable run	Ψ		Ū	\$	1,000.
DS0 100 Pair	\$	327.00	5	-	1,635.
DS1 Cable	\$	303.00	2	\$	606.
DS3 Coxial Cable	\$	82.00	1	\$	82.
Per 1/4 Rack Installation		3,367.99	2	•	
Per Card Installation	\$	214.83	23		6,735.
Wire Power 2/0	Ψ \$	134.00			4,941.
Cable Rack Space	Ψ	134.00	4	\$	536.
			:	\$	26,1
			Required	•	,.
Monthly Cost - Collocation Facilities		Cost	Units	To	otal Co
Floor Space					
Power (40 Amps)	\$	643.00	2	\$ 1	1,286.
Environmental (per 40 Amps)	\$	104.00	2	\$	208.
BITS Timing	\$	13.00	1	\$	13.
Virtual Equip. Maintenance, Per 1/4 Rack	\$	64.13	2	\$	128.
Cable Rack Space, Per Cable-Metallic	\$	3.00	8	\$	24.
	•		Ŭ :	\$	1,6

# EXHIBIT 8

# Collocations in Kentucky ALLTEL Central Offices



# CONFIDENTIAL

SOLEY FOR USEBY ALTE, EMPLOYEES NOT TO BE USED BY ANY OTHER PERSON WITHOUT PRICH AUTHORIZATION.

2	COMMONWEALTH OF KENTUCKY	
3		
4	BEFORE THE PUBLIC SERVICE COMMISSION	
5		
6		
7	Petition of Southeast Telephone, Inc., for )	
8	Arbitration of Certain Terms and )	
9	Conditions of the Proposed Agreement with )	
10	Kentucky ALLTEL, Inc., Pursuant to the ) No. 2003-00115	
11	Communications Act of 1934, as amended )	
12	by the Telecommunications Act of 1996 )	
13		
14		
15		
16		
17		
18	DIRECT TESTIMONY	
19	OF	
17	Or	
20	JEFFREY W. REYNOLDS	
21		
22		
23		
24 25		
25 26		
27	ON BEHALF OF KENTUCKY ALLTEL, INC.	
28	or instruction in the first ind	
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
12		
13		
14	Filed November 10, 200	ኅ

2		DIRECT TESTIMONY OF JEFFREY W. REYNOLDS
3		
4	Q.	Please state your name and business address.
5	A.	My name is Jeffrey W. Reynolds. My business address is 10905 Fort Washington
6		Road, Suite 307, Fort Washington, MD 20744.
7 8		
9	Q.	By whom are you employed and in what capacity?
10	A.	I am a principal in the consulting firm of Parrish, Blessing and Associates, Inc. and am
11		appearing in this proceeding on behalf of Kentucky ALLTEL, Inc. ("Kentucky
12		ALLTEL").
13 14		
15	Q.	Please describe your experience in the telecommunications industry.
16	A.	I have over thirty years experience in the telecommunications industry with
17		management and executive positions in engineering, finance, marketing and regulatory
18		areas. Prior to joining Parrish, Blessing and Associates, I was Vice President -
19		Wholesale Product Management for ALLTEL Communications Services, Inc.
20		
21 22	Q.	What is the purpose of your testimony in this proceeding?
23	A.	The purpose of my testimony generally is to demonstrate that Southeast Telephone,
24		Inc. ("SETel") is not impaired in its ability to provide retail service simply because it
25		does not have access to Kentucky ALLTEL's unbundled local switching ("ULS") or
26		transport. I will demonstrate that under any of the impairment tests established in
27		§251(d)(2) of the Telecommunications Act of 1996 ("the Act"), the Federal
28		Communications Commission's ("FCC") Unbundled Network Element ("UNE")
29		Remand Order, the D.C. Circuit's opinion, or the FCC's recently released Triennial

Review Order ("TRO"), the self-provisioning of switching and transport by SETel or the ability to self-provision makes it unnecessary for SETel to obtain those UNEs from Kentucky ALLTEL.

#### Q. Please provide an overview of your testimony.

A. SETel is a successful multi-product communications firm offering long distance, data, and local service utilizing a switch in Lexington, Kentucky as well as its own fiber optic transport network. SETel is not a new entrant requiring the "jump-start" of UNE-P. Further, SETel does not require access to Kentucky ALLTEL's ULS since SETel has demonstrated expertise in providing that capability for itself.

No operational issues preclude SETel from entering the Kentucky ALLTEL market. Determining the issue of impairment/non-impairment with respect to SETel requires an examination of a number of points including, first, the impairment standards as originally established in §251(d)(2) of the Act and then interpreted by the FCC and later reworked in the FCC's UNE Remand Order. Second, the directives established by the D.C. Circuit and third, the rules provided for in the FCC's TRO also bear on the issue of impairment/non-impairment. SETel's ability to gain access to switching and transport in the SETel – Kentucky ALLTEL market must be examined in light of all of these standards.

Additionally, the relevant geographic market for determining access to switching is, at a minimum, an area encompassing the cities of Louisville and Lexington. This geographic market virtually guarantees SETel access to a number of local switching

alternatives from a variety of sources and vendors. Thus, SETel is not impaired by its lack of access to Kentucky ALLTEL's unbundled switching and transport, nor is the entire market impaired relative to ULS.

A.

# Q. What analysis is involved in determining whether SETel requires access to Kentucky ALLTEL's ULS?

In order to determine whether SETel, or any competitive local exchange carrier ("CLEC"), requires access to Kentucky ALLTEL's ULS involves a discussion of several standards. Generally speaking, whether such access is required depends on whether the CLEC is impaired or non-impaired. This impairment/non-impairment issue involves examination of a number of points including (1) the impairment standards originally established in §251(d)(2) of the Act, interpreted by the FCC, and then reworked in the FCC's UNE Remand Order; (2) the directives established by the D.C. Circuit; and (3) the rules provided for in the FCC's TRO. I may refer to these standards and definitions collectively as "the impairment tests." SETel's ability to gain access to switching and transport in the greater Lexington market must be examined in light of all of these impairment tests.

#### Q. Do the various impairment tests related to unbundling vary significantly?

A. While the overall intent of the impairment tests set forth in the various iterations of the FCC's rules and orders is the same, the courts and the FCC have engaged in an ongoing effort to define impairment more precisely. The Act intended impairment to

be the touchstone of the unbundling requirements. In reversing the FCC's original Local Competition Order, the United States Supreme Court observed that if "Congress had wanted to give blanket access to incumbents' networks," it "would simply have said the whatever requested element can be provided must be provided." Instead, the core of the impairment tests is whether lack of access to a given element diminishes the ability of the competitor to provide the services it seeks to provide.

# Q. What standard for impairment was established by the Act and then codified by the FCC?

A. Section 251(3)(2)(b) of the Act requires, that in determining what network elements should be made available, the FCC "shall consider, at a minimum whether...the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." The FCC's first attempt at interpreting this impairment direction set forth in the Act must be ignored as it was rejected by the United States Supreme Court ("the Court") in AT&T Corporation v. Iowa Utilities Board (1999). However, in remanding the issue to the FCC, the Court asked the FCC for some limiting standard to its definition of impairment and concluded that it is not necessarily true that any cost increase (or margin reduction) impairs the ability of a competitor in any material way. The Court also indicated that the FCC had failed to consider the availability of elements outside the ILEC's network, including self-provisioned elements, in its impairment definition.

<sup>&</sup>lt;sup>1</sup> Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, ¶285, Adopted August 1, 1996, Released August 8, 1996.

$\gamma$	
~	
_	

3	In responding to the Court in its UNE Remand Order, the FCC defined "impair" in
1	Paragraph 51 as follows:

... the failure to provide access to a network element would "impair" the ability of a requesting carrier to provide the services it seeks to offer if, taking into consideration the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element materially diminishes a requesting carrier's ability to provide the services it seeks to offer.

Significantly, the FCC did not include "cost" or "profit margin" in its definition of impairment.

# Q. What was the result of the FCC's imposition of its impairment definition on the various network elements?

- A. In the *UNE Remand Order*, the FCC noted that it would examine five factors in evaluating the availability of alternative network elements (1) cost, (2) effect on timeliness of entry, (3) quality, (4) ubiquity and (5) impact on network operations. The FCC indicated that it would also consider factors that would further the Act's unbundling goals, including:
  - rapid introduction of competition in all markets,
  - promotion of facilities-based competition, investment and innovation,
  - reduction of regulatory obligations,
  - promotion of certainty in the market, and
    - administrative practicality.<sup>3</sup>

The FCC's *UNE Remand Order* was subsequently challenged. In deciding the issue, the Court of Appeals for the District of Columbia ("D.C. Circuit") noted that the FCC

<sup>&</sup>lt;sup>2</sup> Iowa Utilities Board, 525 U.S. at 390

<sup>&</sup>lt;sup>3</sup> 15 FCC Rcd at 3745-50, PP101-16; 47 C.F.R. § 51.317(b)(3)

relied on "cost disparities that were simply disparities faced by virtually any new entrant in any sector of the economy, no matter how competitive the sector." The D.C. Circuit remanded the issue to the FCC and warned that adopting a uniform national rule mandating an element's unbundling in every market regardless of the state of competitive impairment would make UNEs available to CLECs in many markets where competition is not suffering from any impairment. In response to the D.C. Circuit's remand, the FCC issued the TRO on August 28, 2003.

# Q. How does the FCC's TRO reflect the direction of the D.C. Circuit, particularly with respect to unbundled local switching?

A. In its TRO, the FCC concluded that ULS is not impaired for enterprise customers, i.e. customers served by DS1 (or greater) services in all geographic markets. Further, the TRO established a series of operational and economic parameters for testing the ability of a new entrant to provide service by accessing an incumbent's UNEs. The TRO requires state commissions to determine impairment on a market-by-market basis for mass market customers. Moreover, the FCC established a "trigger" for switching impairment – three switches from different providers within a geographic market.

Q. Please describe the "triggers" that the FCC established to determine if mass market switching is impaired.

<sup>&</sup>lt;sup>4</sup> 351 U.S. App. D.C. 329; 290 F.3d 415, Case Summary

A. The FCC established two types of triggers. The first trigger is where a state determines that three or more carriers, unaffiliated with either the incumbent or each other, are serving mass market customers in a particular market using self-provisioned switches.<sup>5</sup> The second trigger relies on the presence of two or more competitive wholesale suppliers of unbundled local circuit switching, unaffiliated with the incumbent or each other.<sup>6</sup> If either trigger condition is met, the state commission must find that that market is not impaired.

# Q. Given the above triggers, is the greater Lexington/Louisville market impaired relative to local switching?

A. No. Even Lexington alone has at least three competitive providers serving the mass market with self-provisioned switches. These carriers include AT&T Broadband, Telcove f/k/a Adelphia, and NuVox. It is unclear whether these competitive providers are also wholesale providers of ULS. Louisville has other CLECs that have self provisioned, and AT&T Broadband is switching its Lexington customers out of its Louisville switch.

# Q. Is SETel impaired under any of the impairment tests if it is denied access to Kentucky ALLTEL'S ULS?

A. No, SETel is not impaired and therefore does not require access to Kentucky ALLTEL's ULS. To begin, SETel does not require access to Kentucky ALLTEL's

<sup>&</sup>lt;sup>5</sup> Triennial Review Order, ¶ 462.

<sup>6</sup> id, ¶463.

ULS since it has its own operational switch. In addition, a number of switches in the Lexington/Louisville area are operated by competitive providers and are available to SETel. In particular, competitors in the greater Lexington/Louisville geographic market with self-provisioned switches include Brandenburg Telecommunications, South Central Telecommunications, and AT&T Broadband. Additionally, there are at least ten competitors with switches in Cincinnati, Ohio, which is approximately only seventy miles from Lexington. In short, SETel has myriad options for obtaining access to local switching.

# Q. Please explain how SETel is not impaired pursuant to the Act and definitions provided for in the *UNE Remand Order*, D.C. Circuit's decision, and the TRO.

A. According to its entries on the Local Exchange Routing Guide ("LERG") and access service requests ("ASRs") provided by SETel to Kentucky ALLTEL's Interexchange Carrier Service Center ("ICSC") group, SETel owns and operates a Lucent Excel switch in Lexington. Therefore, SETel overcomes the self-provisioning aspect of the UNE Remand Order, which specifically considered alternative elements including self-provisioning as factors in determining lack of impairment. Alternative switching capability, as pointed out earlier in my testimony is also available to SETel.

SETel is not impaired under the D.C. Circuit's definition. The D.C. Circuit provided direction relative to the imposition of impairment in markets where competition is working such that a finding of impairment in those cases is unnecessary. Greater Lexington/Louisville is such a market. There are a minimum of four facilities-based

CLECs operating in the Kentucky ALLTEL market, including, but not limited to, Telcove f/k/a Adelphia, NuVox, New South, and AT&T Broadband (who specifically provides service mainly to residential customers). None of these competitive carriers utilize ULS or UNE-P in providing retail service to their customers.

# Q. Do any practical considerations prevent SETel from entering the Kentucky ALLTEL market if it is not provided unbundled switching or UNE-P?

A. No, SETel is not prevented from entering and successfully competing in the Kentucky ALLTEL market without being provided unbundled switching or UNE-P. From an operational perspective, Kentucky ALLTEL has the ability to meet competitors' needs for collocation, cross-connects and "hot-cuts" as discussed by Kentucky ALLTEL witness, Jimmy Dolan. In particular, SETel, with a customer base of slightly over 5,000 subscribers, would not likely need any massive hot cut capability that would tax Kentucky ALLTEL's capabilities. Significantly, SETel has expressed a desire for collocation with Kentucky ALLTEL – which indicates that SETel itself does not consider provision of ULS or UNE-P necessary.

To be clear, SETel is not a fledgling new entrant. SETel appears to have a well-developed business plan predicated on providing local, long distance, and data services. In offering retail services, SETel concurs in the retail tariffs of Verizon, South, Inc., which tariffs are now reflective of Kentucky ALLTEL's retail offerings.

Moreover, SETel has been designated as an eligible telecommunications carrier ("ETC") for federal universal service purposes in the territories of BellSouth

Communications, Inc. and Kentucky ALLTEL. Interestingly, SETel may be the only CLEC in the Commonwealth to have been so designated. Obtaining ETC status for the purposes of receiving universal service funding is not the action of an unsophisticated communications provider.

SETel provides retail services in a bundle and advertises a single bill for the bundle. It utilizes agents to market and sell SETel services — an efficient way to control its expenses. SETel's Lexington switch appears to be capable of performing local switching since recent ASRs provided to Kentucky ALLTEL from SETel reflect an 80% percent local usage ("PLU") factor. In summary, SETel is an efficient provider in the Kentucky telecommunications marketplace.

# Q. Why would SETel seek ULS or UNE-P from Kentucky ALLTEL when SETel is not impaired and has switching capability of its own?

A. Without accessing SETel's business plan, I cannot fully ascertain SETel's objective in acquiring access to Kentucky ALLTEL's ULS. However, one obvious goal is for SETel to drive a UNE-P price to a point that is lower than its own internal cost of providing transport and switching. This strategy has the two-fold effect of conserving the capacity on SETel's switch for utilization in other markets and also of requiring Kentucky ALLTEL to utilize its switching resources at below cost levels thereby depleting Kentucky ALLTEL's financial resources. This is the very condition that the United States Supreme Court attempted to remedy when it mandated that a

competitor's profitability was not guaranteed through the acquisition of unbundled elements.<sup>7</sup>

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

2

3

Additional items have arisen in the course of these negotiations that clarify SETel's interest in obtaining ULS or UNE-P from Kentucky ALLTEL. For instance, SETel has requested reciprocal compensation be paid on ISP-bound traffic terminating on its network. In addition, SETel has pushed for a flat-rated port charge. Taken together, these two items indicate that SETel desires to move significant amounts of ISP-bound traffic through Kentucky ALLTEL's switches. This action on the part of SETel would not only burden Kentucky ALLTEL's switches but would also provide SETel with a revenue windfall in the form of reciprocal compensation if SETel were allowed to be paid for ISP-bound traffic. SETel's interest in providing Internet service was emphasized by SETel President, Darrel Maynard, in his presentation to the Rural Utilities Service in which he spoke of the need for deployment of broadband services to rural America. Kentucky ALLTEL witness, Cesar Caballero, will discuss why SETel's proposal for reciprocal compensation with respect to ISP-bound traffic is not only inappropriate but contrary to the FCC's ISP Order. The only logical conclusion to be drawn from these facts is that SETel is merely seeking access to Kentucky ALLTEL'S ULS or UNE-P simply to enhance its bottom line. SETel is clearly not

<sup>&</sup>lt;sup>7</sup> AT&T Corporation v. Iowa Utilities Board (1999) The Court declared,

<sup>...</sup> the Commission's assumption that any increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element "necessary," and caused the failure to provide that element to "impair" the entrant's ability to furnish its desired service is simply not in accord with the ordinary and fair meaning of those terms. An entrant whose anticipated annual profits from the proposed service are reduced from 100% of investment to 99% of investment has perhaps been "impaired" in its ability to amass earnings, but has not ipso facto been "impair[ed] ... in its ability to provide the services it seeks to offer"; and it cannot realistically be said that the network element enabling it to raise its profits to 100% is "necessary."

impaired in any way or under any of the impairment tests from providing retail
services to its customers.

**5** 

- Q. You stated earlier that in addition to its own switch, SETel has access to alternative switching arrangements. How may SETel utilize a CLEC switch in another city to serve customers in Lexington?
- A. SETel currently back hauls traffic from the Louisville area and its various customer locations to its switch in Lexington. The reverse of this would apply if SETel were to use switching capacity from a CLEC switch in Louisville. The back-haul network is obviously in place since SETel is currently moving traffic between these two cities.

- Q. Is it necessary for SETel to install and operate a switch in each city that it attempts to serve?
- A. No. Not only are there competitive switches in the immediate Lexington area (e.g., Brandenburg, South Central), but there are additional switches in Louisville and Cincinnati, Ohio. It is common practice for competitive entrants to serve a wide geographic area with a single switch. In Administrative Case No. 2003-00023 (In Re: AT&T Broadband Phone of Kentucky, LLC v. ALLTEL Kentucky, Inc. and Kentucky ALLTEL, Inc.), AT&T Broadband witness David J. Sered discussed the network architecture utilized by AT&T Broadband in Kentucky. On page 15 of his Direct Testimony Mr. Sered explained that AT&T Broadband has elected to deploy only one switch in Kentucky located in Louisville. He then noted that this switch has

the capacity to serve other parts of the Commonwealth beyond just Louisville. Furthermore, on page 11, Mr. Sered states that AT&T Broadband's Louisville switch serves customers throughout Kentucky. In conclusion, it is clear that city boundaries or distances are not a constraint to CLECs accessing switching capabilities and that there is no shortage of competitive switches available to SETel within a seventy to eighty mile radius.

Q. Have you read the direct testimony of Kentucky ALLTEL witness, Timothy

Wagner?

12 A. Yes, I have.

A.

Q. Based on Mr. Wagner's testimony, is SETel impaired in its ability to provide service without access to Kentucky ALLTEL's ULS?

Mr. Wagner puts forth a logical "road map" that, from a practical standpoint, demonstrates that SETel is not at all impaired. First, he points out that SETel currently owns and operates a switch that (based on technical documents, test calls and discussions with other knowledgeable individuals) is currently being used to provide qualifying telecommunications services through its Lexington switch. Mr. Wagner then goes on to discuss the ability to upgrade SETel's switch should certain functionality be missing. Finally, he discusses numerous economical alternatives that a provider such as SETel could consider if it desired to replace its existing switch – all of which would occur before SETel would have to consider the existence of other competitive providers with switching capability in this market. Mr. Wagner's

testimony also addresses practical solutions that indicate switching "unimpaired" SETel really is.

Q. Is there any reason to suspect that SETel will not remain a viable competitor if it is denied access to Kentucky ALLTEL'S ULS or UNE-P?

A. No, instead, SETel continues to show every sign of remaining a successful communications provider in Kentucky. From a retail perspective it is charging rates that match the incumbent rates and is able to offer a complete array of services – long distance, local, Internet, and paging. Also, SETel has been savvy enough to gain ETC status that will allow it to take advantage of universal service support and has managed its expenses by employing its "hometown agent" program which allows for a measured and scaleable approach to deploying services. Further, SETel's ability to remain a privately held corporation is a testament to its viability.

It is not necessary for SETel to have access to Kentucky ALLTEL's ULS or UNE-P to remain successful. SETel has shown that it is capable of deploying telecommunications infrastructure efficiently and economically through its switch and hub of fiber optics in Lexington. It was apparently one of the first CLECs in eastern Kentucky and has been in business since 1996. None of the facts supports a conclusion that SETel will not continue to be a viable competitor if it suddenly now does not gain access to Kentucky ALLTEL's ULS or UNE-P.

#### Q. Would you please summarize your testimony?

A. SETel is a successful competitor in the Kentucky communications market. It offers a broad array of services including local, long-distance and data services. SETel has demonstrated capabilities in deploying and operating telecommunications infrastructure, most notably a switch in Lexington and a related fiber optic hub. In addition, the areas surrounding Lexington have a multitude of competitive switching alternatives within an eighty mile radius. SETel is not impaired in any way from providing the services it seeks to provide by not having access to Kentucky ALLTEL's ULS or UNE-P. In fact, the only carrier that stands to lose in this scenario, is Kentucky ALLTEL who would suffer great harm in the form of economic erosion and network exhaustion as a result of having to provide ULS or UNE-P to SETel.

#### Q. Does this conclude your testimony?

A. Yes, at this time.